### Tomorrow's managers: A new plan

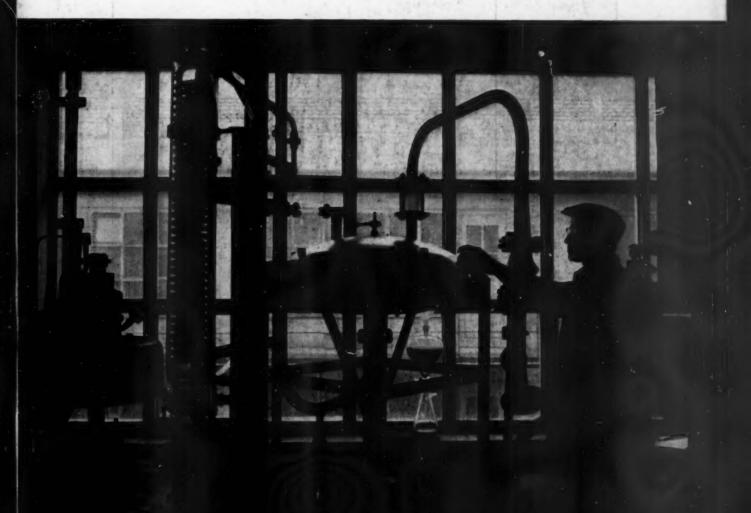
-BUSINESS proposes a national scheme

• The man who hated paper £sd of the company plane



# JOURNAL FOR MANAGEMENT

NOVEMBER 1959 3-





Tullis Russell

# USINI

JOURNAL FOR MANAGEMENT

#### COVER PICTURE



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pursuit of progress - a laboratory assistant checks an experiment. Photo taken in a Geigy laboratory.

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#### Tomorrow's Managers-A New Plan

Plans for Britain's Advanced Business School will be announced soon. BUSINESS believes the best teachers of management are the men who manage—and proposes a 3-point syllabus

Industry Hunts for the £3,000 Man Executive job survey no. 4 for the man moving ahead by Charles Owen

'Master' Plan Ends Order Troubles Photocopying ends a company's delivery headaches by Tom Stone

The Man Who Hated Paperwork A small manufacturer faces his biggest problem BUSINESS Advice Bureau

Free Speech Beats the Slump Bogy A new-look management scheme wins worker co-operation by Owen Webster

The £ s.d. of Executive Flying Does the company aircraft pay?-a BUSINESS report by Arthur Sitwell

String and Brown Paper Speed Repairs [82 Case-history envelopes keep work flowing smoothly by Laura Tatham

Tomorrow's Craftsmen—Who Pays? 86 BUSINESS backs a tax-rebate scheme for apprentices by Dennis Brooks

Britain Needs a Window Like This Report from Rome on Italy's new permanent exhibition by William Guthrie

We Handle a Million Invoices Dunlop's plan beats the problem of carbon-copy errors by John Smith

Why Industrial Films Are Booming by George T. Rae

" Second Opinion"

BUSINESS Bookshelf

Man in the Frayed Flannel Suit These 'Guarantees' May Trap You BUSINESS lawyer

3 AT A GLANCE FORECAST 21 **PACEMAKERS** 

Who Can Help Me Sell Abroad?

INDUSTRIAL OUTLOOK LABOUR HIGHLIGHTS

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Executive Appointments face 65 Renders' Service Cards face 104 Classified Guide to Equipment 142 Alphabetical List of Advertisers 144



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2

BUSINESS

# ECONOMIC PROSPECT

Survey and Forecast of Business Conditions

# Production up 8 per cent

▶ Industrial production is up 8 per cent on last year. Few would quarrel with the view of the National Institute of Economic and Social Research that "The rise in production should not be checked either by shortages of capacity or by shortages of labour."

► Higher production has not been matched by increased employment, so productivity is rising. The climate of opinion is against wage awards, so profits will rise and/or prices fall.

▶ Unemployment seems likely to rise rather than fall. It will no doubt fall in December because of Christmas trade but will then probably rise to a peak in January/February and may not get below 400,000 until next June.

Prices and wages should continue steady.

# Bright future for exports

If expansion is to continue it is important for the balance of payments to be healthy. It almost certainly will be this year. The prospect for exports has rarely been better. World trade is recovering and, according to the G.E.C. Export Guide, in only four out of this country's 34 major markets is the prospect bad or deteriorating.

In July BUSINESS said: "It seems quite clear, however, that there will be no boom in private investment this year." All evidence so far confirms this. The Board of Trade sample inquiry shows industry's capital investment down 10 per cent on the first half-year. The latest F.B.I. inquiry into industrial trends shows an over-all trend towards lower expenditure on building. In plant and machinery the prospect is better.

The level of the gold and currency reserves continues to inspire confidence. Reserves are growing too in primary producing countries and in Western Europe, forming a firm basis for an expansion in international trade.

Personal spending is expected to continue buoyant, augmented by additional borrowing from the banks and on hire purchase. But hire purchase debt will probably level off after Christmas.

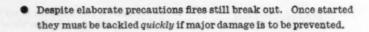
In short, economic growth will continue without pressing on resources. Industrial production may show a 10 per cent rise by the end of the year. The Reserves are satisfactory and trading prospects first class. Private investment lags. There may be pockets of chronic unemployment.

Expansion without inflation

**OUTLOOK FOR INDUSTRY, PAGE 5** 

EMPLIER

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### **OUTLOOK FOR INDUSTRY**

This month BUSINESS presents, on the panel below, its indicators of future economic activity in a way which should be of even greater use to businessmen. Based on our sample surveys, we make a direct forecast of likely changes in the production of consumer and producers' goods.

#### Steel and shipbuilding

Steel consumption continues to grow but demand is damped by stocks held by industry. When these are absorbed production will go ahead faster, but the improvement is likely to be slow for heavy products. In contrast, there is an acute shortage of sheet steel, and no immediate prospect of importing any from America.

Shipbuilding The industry's order

THE NEW BUSINESS SHORT-

#### Consumer Goods

Production still increasing The production of consumer goods will increase again in December, but perhaps at a slightly lower rate than currently. Further outlook: very good.

#### Producers' Goods

Further Rise Expected

Indications are that in December production of producers' goods will again increase, and at a higher rate than at present. Further outlook: very good.

These forecasts are based upon the monthly analysis made by BUSINESS of orders received in contract engineering and contract design. The Editor wishes to thank members of the ENGINEERING INDUSTRIES ASSOCIATION, FEDERATION of ENGINEERING DESIGN CONSULTANTS, and other design consultants for their co-operation. A summary statement of how the analysis is made will be supplied to readers on request.

book has contracted further, and is now less than 4½m. gross tons (2-3 years' work). But this is unevenly distributed and some yards which build coasters and small cargo ships have empty berths. The prospect is not hopeful.

Atom ships Submarines and icebreakers notwithstanding, there is no sign yet of a commercially feasible reactor for ships.

#### Fuel and power

Coal and Gas In the long run coal's future may be as a raw material for the chemical industry rather than as a fuel. In the meantime the outlook is grim. Stocks are now over 50m. tons and usage is declining in industry, railways, domestic heating and in the manufacture of electricity and gas. The contracting market for coke makes it more expensive to make gas from coal, so that the Gas Council, who are themselves under strong pressure from electricity, propose to build tankers to import methane gas.

Electricity The capital cost per kilowatt of capacity of the latest conventional power stations is less than it was ten years ago. New contracts for nuclear power stations in the U.K. are likely to average one a year for the next five years. There are now only three groups offering to build such stations.

#### Light engineering

Cars Manufacturers are trying to produce at the rate planned for 1962. Demand is extremely high, with long waiting lists for certain models. Second hand prices are likely to fall less than usual for the season.

In the first eight months of this year Britain exported more cars than anyone else to the United States, and prospects look good. The new American 'economy cars' may offer more serious competition to British cars in third markets than in the U.S. itself.

Scooters and mopeds The outlook is good in the home market, poorer abroad.

Agricultural machinery The U.K. is the largest exporter of tractors in the world. Production is currently running ten per cent up on last year. Home sales are firm, but in export markets we have been losing ground to Germany.

Aircraft Britain is ahead in evolving a jet vertical take-off and landing aircraft which may revolutionize air travel.

Refrigeration Fishermen may soon be in the market for freezers, as they are obliged to go further afield for their catch.

Coated steel There is a prosperous future, especially in the manufacture of domestic appliances, for sheet steel to which P.V.C. has been bonded.

Aluminium foil Reynolds-T.I. have acquired a large interest in U.K. production and will find new outlets for the product.

#### Textiles and clothes

Cotton Scrap plans will reduce capacity in spinning and weaving by about one fifth compared with the amount of machinery in use in April. Nominally, more is being scrapped but much was not in use anyway.

Man-made fibres Activity is high, order books are full, and the outlook is good.

Aluminium clothes for both fashion and industrial use are forecast for the not-too-distant future.

New yarn An entirely new yarn is said to be ideal for home knitting and to wash without shrinking, felting or loss of shape.

Paper throw-away dresses may be on the market within two years.

#### Consumer goods

Tape-recorder sales will boom.
Radiogram sales will probably continue to decline.

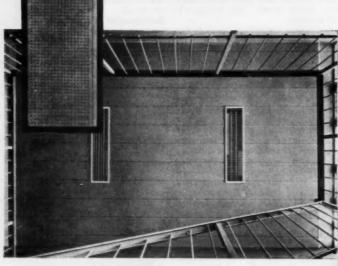
Electric lamps Demand, already growing, will be boosted by recent substantial price cuts.

#### Commodity prices

Copper expected to rise. Zinc more likely to rise than fall. Tin unlikely to rise. Aluminium expected to rise. Rubber Expect price to fall and then stabilize. The Board of Trade is to dispose of 100,000 tons of its rubber stockpile. But natural rubber's position is sound and British (and American) official sales should stabilize price, after reducing it from its present high level.

**KEY INDICATORS, PAGE 7** 

# ANKARBOARD makes sound sense in busy buildings



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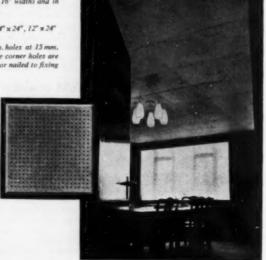
16'' \( \times 32'', \) and \( 32'' \times 32''. \) Tiles are bevelled on all four edges.

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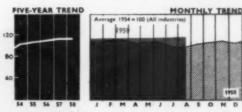
BUSINESS

# **KEY INDICATORS**

#### STATE OF THE NATION 3

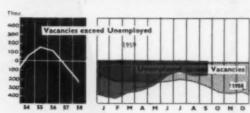
#### INDUSTRIAL PRODUCTION >

By the end of this year, industrial production will probably be ten per cent higher than a year ago. Latest figures show that it is already eight per cent up. Cars and domestic appliances still lead the way, but most sectors, including textiles, steel and engineering report increased activity. Machine tool orders have not yet picked up.



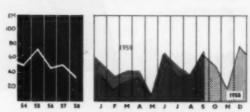
#### EMPLOYMENT POSITION >

There is not likely to be any general shortage of labour this year. Unemployment seems likely to stay around the 400,000 mark, or about 1.9 per cent of the working population. Many of the school leavers have found jobs, and employment is at its highest for two years. There are still more unemployed than unfilled vacancies.



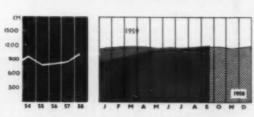
#### TRADE GAP

This year, the balance of trade should be satisfactory. In September imports were up and exports down and the gap increased to £72.3m. from its August figure of £40.5m. This was to be expected. More imports will be needed for higher production, and the fall in exports follows from the reduced activity in the holiday months of July and August.



#### GOLD AND CONVERTIBLE RESERVES

The gold and reserves position is solid. Most commentators probably expected the end September figures to show a fall. In fact they showed a rise of £13m. In the face of the Election and the rise in American short rates this is quite remarkable, especially when it is remembered that this is seasonally the worst time for sterling.



Bank clearings continue to grow and are 11 per cent up on last year.

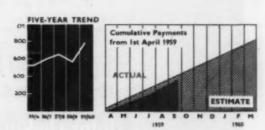
Midland Bank index of business turnover is 11 per cent up on last year.

Lloyds Bank index of deposits is five per cent up on last year.

### **GOVERNMENT SPENDING**

#### NET EXPENDITURE BELOW THE LINE

At the half-way mark, expenditure below the line is still under the estimate but is catching uplisues under the Exports Guarantees Act have reached only £17m. out of a budgeted £50m; loans for House Purchase have been less than £1m. out of £25m.; a provision of £20m. for Colonial Loans has not been drawn upon; the Nationalized Industries have received £200m. of £490m.



GUIDE TO THE CHARTS. The charts showing Five Year Trends use mostly monthly or quarterly averages so that they are comparable with the charts alongside them showing the more recent trends. Details of the statistics used in the charts, and other related statistics, may be had on application.

CAPITAL AND CONSUMER SPENDING, PAGE 9



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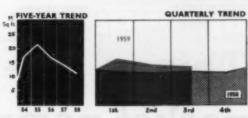
John Dickinson & Co. Ltd.

### CAPITAL SPENDING

#### STATE OF THE NATION 4

#### FACTORY BUILDING APPROVALS

Factory building will not grow very much in the immediate future. Approvals in the first three quarters of this year show an improvement on last year, but much of this arises from one large steel project in the first quarter. The latest F.B.I. inquiry shows only 24 per cent expecting to authorize more building in the next twelve months: 35 per cent plan to order less.



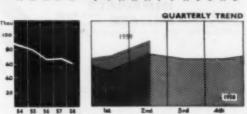
#### MACHINE TOOL ORDERS

Reports from a few large firms indicate some increase in ordering in recent weeks, especially from the vehicle and household goods sectors. This improvement is not reflected in the statistics, which do not go beyond June. There is still, however, considerable idle capacity in the industry.



#### HOME BUILDING STARTS

It is estimated that in the third quarter house building starts were again 25 per cent up on last year. At this rate some 300,000 permanent houses will be commenced this year, a number not reached since 1955. There is still a shortage of bricks, but the big shortage is of building sites.



Overseas contracts. British firms are carrying out construction work abroad worth £120m. a year.

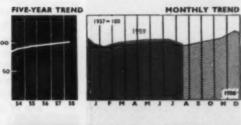
New construction orders are being received at the rate of over £1,500m. a year.

F.B.I. Inquiry shows more expenditure planned on plant and machinery.

### CONSUMER SPENDING

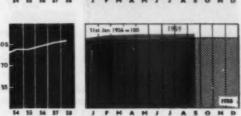
#### RETAIL SALES

Retail sales are likely to continue to improve. More people are in employment, short-time working has gone down and overtime has gone up. And Autumn is in any case the peak buying season. Prospects in the furniture trade are excellent. It should be a bumper Christmas. September sales are 5 per cent up on the year.



#### WAGE RATES

Wages seem likely to stay steady for the remainder of this year. The most important claims pending are those for a forty-hour week made by the electrical, engineering and shipbilding trades unions. If granted, these claims would not affect the index, but they would, of course, affect wage costs.

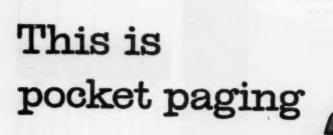


Clothing and footwear sales in August were the same as a year ago.

Durable goods sales in August were 22 per cent up on a year ago.

Retail stocks are being held at about four or five per cent above last year's level.

CREDIT AND PRICES, PAGE 11



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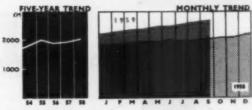


#### CREDIT

#### STATE OF THE NATION 5

#### BANK ADVANCES

There is room for a greater expansion of bank advances. They are a profitable form of investment for the banks, the public is no doubt prepared to borrow, and there is no reason why the authorities should frown on the creation of new debt in this way. This year the average increase per month by the London Clearing Banks has been £54m. In September it was £42m.



#### HIRE PURCHASE DEBT

The total of hire purchase debt outstanding will probably continue to grow. This is a busy period for the sale of household goods, a high proportion of which are sold on hire purchase. Demand for cars is high: the problem is one of supply. Total h.p. debt is now some 60 per cent up on last year.

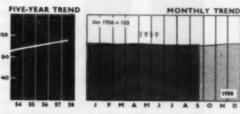


Bank Rate remains unchanged at 4 per cent.
Treasury Bills are just below 3½ per cent.
Personal and Professional Loans are up 65 per cent to £544m.

### **PRICES**

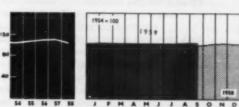
#### RETAIL PRICES

Prices will probably continue steady. In September the Retail Price index actually fell 0.6 points but to the nearest whole number the index remains at 109. Import prices have risen a little, but productivity is high and no big wage awards are likely to be made. It would be very surprising if the index moved very much.



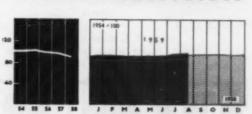
#### RAW MATERIAL PRICES

The prices of the raw materials used in industry remain almost unchanged. In September the index rose very slightly to 102.1 mainly due to higher prices for raw rubber, tungsten, palm kernels and bacon factory pigs.



#### TERMS OF TRADE

The terms of trade improved one point, to 90, in September, after two consecutive months in which they had deteriorated. The 'improvement' is not altogether a good thing for it is caused by a rise in the export prices of engineering products and textiles,



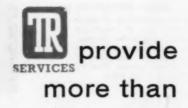
The Financial Times' Commodity index at 81.69 is slightly up on a year ago.

Tramp Shipping Freights. At 71.0 the September index has improved five points on the year.

Tramp Time Charter Rates. The September: ndex shows little change at 55.4.

END





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# These 'trained men' are shocking

Sir.

I am shocked at the fundamental lack of know-how exhibited several newly - recruited employees, all of whom received their workshop training at some of our best-known companies.

More money and effort than ever before are being spent in training technicians at school and we often read about 'wonderful' works training schemes. when it comes down to it, the result is just not good enough.

Work aids are increasingly making the task of the craftsman easier, yet standards are deteriora-I consider the younger generation to be vastly inferior to the enthusiastic and capable technicians of my day.

GEORGE TURNER

Bath Street. Glasgow.

• See page 86, this issue.

#### Five sterling to the pound?

I was very interested in your excellent article on decimal currency (Business, September). The difficulty lies in trying to retain the pound sterling or something near it in value. Thus the 'cent' becomes worth a little under 24d. and—as you so rightly say this is too expensive for many Lothian (How we Evaluate Our everyday articles which need a relatively fine graduation in price to represent their true value,

The lowest usable coin today is the &d. and a 'cent' should correspond to this as near as possible.

money (call it the 'sterling,' or any other suitable name) this could divide into 100 cents, each of approximately 1d. in value.

equal the present pound sterling exactly. Thus old accounts, prices, etc., could easily be converted to the new currency.

ALVIN SAXON

Saxon Finance Agency. 48 Grafton Way, London, W.I.

#### Copy-book test for character

Surely handwriting is almost infallible as a guide to temperament, physique and character when interpreted by an expert? (March of Business, October). Otherwise why are graphologists attached to some American insurance companies and faculties in at least two European universities?

Meticulous copy-book handwriting in middle-aged and young people should be a warning to a potential employer. Either the writer is immature or an introvert -or "wearing his best clothes" because he has so much to hide!

FRANCIS J. FIELD

10 Richmond Road, Sutton Coldfield, Warwicks.

#### **Diplomatic** salesmen

Congratulations to Mr. Alan Salesmen, October). Since reading his article I find myself noticing Gillette displays with the same interest as he does himself.

But as a sales training consultant I am surprised that so little empha-Taking 4s. as a basic unit of sis is put on the salesman's "ambassadorial role." 10 years teaching salesmen to sell a speciality product I had the task of forecasting what their repre-

Five of these 'sterlings' would sentative potential would be in the field.

> This was to evaluate not only their worth as selling men but also to what extent they would be worthy ambassadors of the com-

> The method I evolved showed that some salesmen can fool some trainers some of the time! Mr. Lothian's method seems to ensure that he is never likely to be fooled any of the time. I sincerely hope this is true.

PHILIP R. LUNN OTMA Group of Companies.

Little Russell Street. London, W.1.

#### He could have saved these men

Your answer to the employer who asked "Must I sack my coloured workers?" (Second Opinion, September) was probably correct - if they really do have to be sacked.

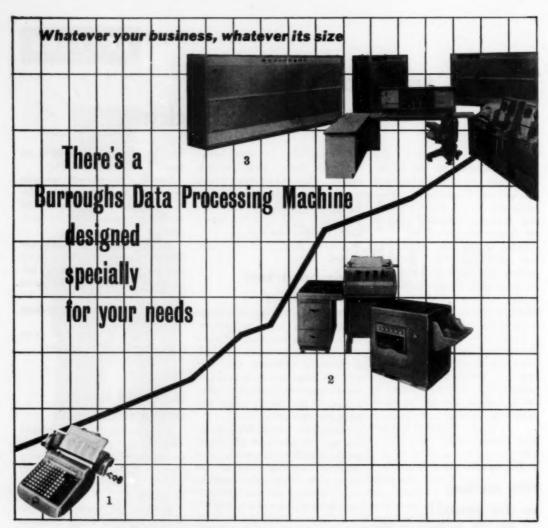
However, my reaction was that when it appeared to this employer that his sales were not supporting full employment he should have taken immediate action in his sales department to correct the position. Then the question would not have

D. D. LOWETH

Loweth & Partners. 48 Brook Street. London, W.1.

> Please address your letter to:

Editor. BUSINESS, 109-119 Waterloo Road, London, S.E.1.



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14

# MARCH OF BUSINESS

#### Miss secretary knew the answers

It appears that BUSINESS has a large number of unofficial enthusiasts—the secretaries of its 55,000 readers.

Main topic of conversation at the finals of the Miss Secretary of Great Britain contest, organized by Remington Rand, was this magazine's recent article, Will the Secretary Survive?

The winner—25-year-old Audrey Robinson—also quoted the article when the judges asked her views on dictating machines. Miss Robinson, from Belfast, is secretary to Hugh Reid, joint managing director of Harry Ferguson.

### Office case studies

Twelve case studies on office management have been published by the European Productivity Agency, 3 Rue Andre Pascal, Paris 16. Copies are obtainable from Business Management Division (Ref. P.381) of the Agency.

## Now they train 26 times faster

On page 86 of this issue begins an article which points out the lack of an over-all policy for apprentice training in Britain. 'Training Services in Industry,' published by the Industrial Training Council (1s. 6d.), makes a number of useful recommendations and gives case histories of training services provided by employers' organizations in various industries.

Describing the training of workers in the boot and shoe industry, the booklet states that the closing rooms are mainly staffed by women among whom there is a high turnover rate. To meet this problem a 'training labora-

Date for your diary

Dr. Robert McMurry, America's best known authority on executive selection, is to reveal his methods to British businessmen at a twoday clinic at the Ruben's Hotel, London.

Using fundamental psychological techniques, Dr. McMurry's system eliminates any possibility of a mistake in selecting the right man for the right job.

His visit here has been arranged by BUSINESS. If you would like to attend the clinic—on November 26-27—please write immediately for full details.

tory' was begun and it was found that people trained on new methods reached—after six weeks—the standard attained by conventional methods after three years.

## An apprentice goes globe trotting . . .

James Semple, 18, training at AEI's Larne, N. Ireland, turbine factory, has been voted British apprentice of the year and as a result has won a 12-month trip to Australia. The scheme, run by the British Junior Chamber of Commerce on a suggestion made by the Adelaide Chamber, is now in its



AUSTRALIA - BOUND apprentice James Semple gets congratulations from his boss, Lord Chandos.

fourth year. Next year the idea will be extended to commercial and craft apprentices—the commercial apprentice spending six months in the USA and the craft apprentice six months in Western Germany.

Until now, cash for the venture has come from Junior Chamber members, but an appeal to industry has made possible an extension of the scheme. Employers will benefit from the wider view which apprentices will gain.

### . . . But others have it good too

The Industrial Welfare Society, who have just completed a survey on apprentices' conditions, found that the fiercely disciplined lads of the old days, who slaved away at their crafts for little or no pay, have changed out of all recognition. Now they are youngsters between 17½ and 22, have money in the bank, probably own a car, and may be thinking of emigrating. They may even be married.

A questionnaire was given to 400 boys—the cream of British apprentices. Here are some of their surprising answers:—

Fathers' jobs are greatly varied, ranging from senior managers to labourers, from ministers of religion to turf accountants. One-third of those living at home give between £2 and £3 of their weekly income to their parents. Twenty-five per cent give between £1 and £2, and another 25 per cent between £3 and £4.

#### Filmstrip helps train clerks

Simpler and cheaper, filmstrips are invaluable to industry and commerce. A filmstrip comprises a number of individual frames joined in one length of film which is

# the answer to immediate expansion problems . . .

### TERRAPIN

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#### FROM SHELF TO SITE DELIVERY

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A fine handsome structure of high quality and appearance, yet with low maintenance costs.

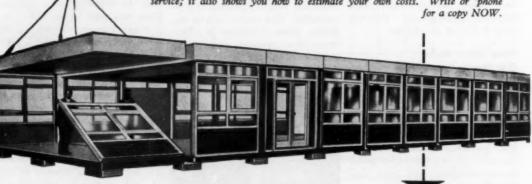
#### ECONOMICAL RE-SITING

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ALL THIS AT A BASIC COST OF NO MORE THAN 30|- TO 35|- PER SQUARE FOOT OF FLOOR SPACE—ERECTED AND FINISHED.

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manually put through a simple projector. It thereby has the advantage that any frame can be held on the screen for as long as necessary.

A new strip just published by Educational Productions, East Ardsley, Wakefield, Yorks, and called 'Correspondence Filing Part 1' (19 frames, price 16s. 6d.), deals with different types of filing systems and shows how filing is handled up to and including the moment it reaches its correct place in whatever system is used. Part 2, soon to be issued, deals with the other side of the problem-how to extract material once filed. Use could be made of the strip in commercial, secretarial and management courses.

More technical are a series of strips for student electronic engineers. These are issued by Mullard and the first, 'Thermionic Oscillators,' comprises 27 colour frames and is available from Unicorn Head Visual Aids, London, at 25s.

# Heating with machine tool precision

Over 20 firms co-operated in the

MARCH OF BUSINESS CONTINUED

making of the Electrical Development Association's latest film, 'Industrial Electric Heating.' After briefly explaining the theory of electrical process heating in many industries, it deals at length with the practice. The film is intended primarily for the nontechnical manager and for students.

Following the current trend in industrial films, 'Industrial Electric Heating' is in colour. This assists in putting over the points of the 30-minute film, as, for example, in showing metal changing colour and melting. The film, like others from the Electrical Development Association, is on loan free.

## Top executives advise juniors

The '40 Club'—a junior section of the Leicester and District Hosiery Manufacturers Association for men of executive or potential executive status—has marked the end of its first year with a progress report and a pointer to the future. Some well-known people will be giving talks in the coming months:

Dr. A. I. Lenton, British Nylon Spinners; Mr. J. C. H. Hurd, Head of Leicester School of Textiles; Mr. H. M. Moulden, Hosiery Trade Union; and Mr. J. A. Lewardo, Marks & Spencer.

## Here is the

What is the point of filing letters and documents? A spike is the best point—says E. G. Robinson, with some humour but much meaning, in an article in 'The Secretary,' the journal of the Chartered Institute of Secretaries.

"Primitive methods may still have their place," says Mr. Robinson. "The object of filing letters and documents is to enable them to be found again—if required. And the spike admirably provides a resting place. When files are being cleared of old correspondence it is noticeable that many letters stored for so long need never have been kept at all. Others, and their replies, clearly show a strictly limited period of interest."

What we must do, says Mr. Robinson, is to recognize such papers and give them a temporary resting place. The spike provides a margin of safety if we empty it every three months or so.

But destroying papers demands courage of a kind that rests upon a confidence in our judgment of the future. "Someone is bound to want it if we throw it away," we say, and to guard against the eventuality we store reams of useless paper.

Mr. Robinson gives us examples of suitable matter for spiking:-

- Letters that will require no action and are not replies to communications already filed elsewhere, such as enclosure notes, order acknowledgements, notifications of changes of address.
- Requests for information which, once given, will terminate the correspondence, and replies.

### It's the Shape That Counts!





ANTHROPOMETRY—not the latest in office fashions. G. A. Harvey took these unusual shots to show how correct furniture design promotes both health and efficiency. On the left: wrong posture induced by too-high desk and chair compresses the lower thighs, encouraging circulation troubles. On the right: the 2in. lower furniture recommended by B.S.I. Thighs are parallel to the ground, feet firmly planted, avoiding undue pressure; forearm angle in correct relation to the desk surface.



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BLICK TIME STAMP For time and date stamping forms, correspondence or documents.



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**BLICK JOB-TIMER** Reveals the truth, the whole truth and nothing but the truth. Legible, Tamper-proof. Essential for accurate and undisputable j ob costing.



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3. Requests (both incoming and outgoing) for samples, leaflets, catalogues, unless some other arrangements are required as part of a system of following up inquiries.

Those unsuitable are:-

- 4. Letters, papers or documents which may possibly needed again for information, evidence or continuity of correspondence.
- 5. Communications that may lead to a development of correspondence.
- 6. Letters continuing or termin a t i n g correspondence already filed elsewhere.

He concludes: While spikes may be difficult to search they have the advantage that papers on them are chronological and if the approximate date of the letter is known finding it involves no great effort. And while advocacy of a return to spike filing may seem like proposing to return to the archaic, it should be remembered that 18 inches of spike costs far less than the conventional filing equipment necessary for the same amount of paper.

#### What an architect can do

One would have expected that all factories built today have been architect-designed. But apparently not, for RIBA have produced a four-page leaflet entitled 'Your factory-why you should use an architect.' It tells the industrialist what the architect offers and the advantages and economies which he produces even with small factories. Copies available free from RIBA, 66 Portland Place, W.1.

#### The annual outing -by air now

The annual company outing has come a long way since the middle of the last century as the solitary day in the working year when employees might meet socially away from work under the benevolent, if autocratic, guidance of the management. Today, nopassport air trips to France, mass of job to schoolchildren. The

MARCH OF BUSINESS CONTINUED

coach outings to Blackpool or Southend and special trains are part of normal social life of industry.

A new Industrial Welfare Society information summary provides advice, facts and figures on every conceivable matter from the seating capacity of canal passenger barges to insurance against bad weather.

Detailed accounts are given of the current outing practice of ten companies in various industries, ranging in size from 200 to 15,000 employees.

#### Secretaries are part of the service

Closed circuit television between the new Keirby Hotel, Burnley. and nearby factories is expected to be a feature of the hotel when building is completed next month. This should make the hotel a prime attraction for such meetings as sales conferences and lectures.

Other star attractions for business visitors to the hotel are: secretarial services; car accommodation for every suite; up-todate Stock Exchange information; permanent suites for industrial organizations; special executive suites on the roof.

The hotel-built at a cost of £250,000-is strategically placed to attract not only visitors to Burnley but also to the surrounding towns of Preston, Blackburn, Halifax, Accrington, Nelson and Colne. It is to be eight storeys high, contain 48 bedrooms each with private bathroom, and include restaurant, private dining room, lounges, cocktail and lounge bars, and ballroom.

#### Films as an aid to recruitment

Careers masters may become out of date in Denmark. The Danish trade unions and employers' federations have recently sponsored a series of film strips with commentaries for illustrating various types

Danish Central Labour Exchange is also interested.

This is one of 18 items in Ergonomics, the current issue in the European Productivity series published by O.E.E.C. Other subjects are job evaluation, noise and lighting at work, and training for rapid reading. It is obtainable free from Room 2409, Board of Trade, Horseguards Avenue,

#### Take-home books for employees

We hear much these days about the 'Whole Man.' Psychologists invite us to consider what part of man appears at his desk or workbench in the morning and what part engages in home and social

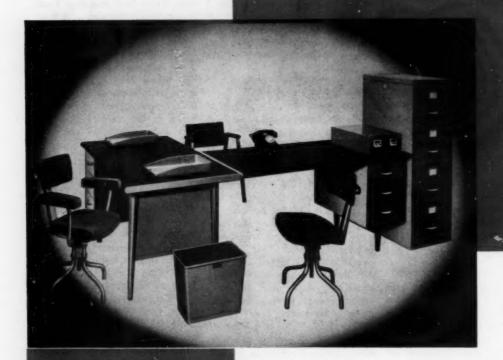
It is probably along these lines that the publishers, Newman Neame, were thinking when they began their 'Take Home Books' scheme three years ago. These admirably produced little books are intended to be bought on a yearly subscription basis and offered free to employees. have been conceived for a wide range of readers from shop floor to office and deal simply and clearly with scientific, economic, domestic, medical and social matters. A new booklet appears every fortnight and 50 copies of each issue can be had for a yearly subscription of £45.

#### Companies can join the R.S.A.

The Royal Society of Arts is to accept limited companies as members. This is the first time, since the foundation of the society in 1754, that companies have had the opportunity to be directly associated with

Among the more material advantages to be gained are: the right to attend society meetings and lectures; to use the library and reading room; to hire at reduced rates the society's room for exhibitions and meetings.

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Steel office furniture for busy people

Leabank steel office furniture for—
Modern design and pleasing appearance.
Long life and efficient service.
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Details of full range on request.

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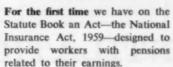
# Part Time is Big Time



Supermarket Customers are fulled into a buying mood by pre-taped music slyly interspersed with commercials 'plugging' special attractions

U.S.D.A.W., Mr. T. W. Cynog-Jones, reports that will provide advice. in American retailing, the part-time worker is not a temporary convenience but an integral part of the organization. By using part-time workers, shops have enough assistants at peak periods without having too many at off-peak times. The hours they work vary: some work a full day on Thursdays, Fridays and Saturdays, others work 11a.m. to 4p.m., and some work in the evenings. The unions accept the problems

and advantages of employing parttimers and in the main accept the need for them. Some restrictions are imposed. In one Chicago store a part-timer is allowed to take an order only when all the other salesmen are serving. This is to protect the commission earnings of the full time staff.



It will come into effect in two years' time. It does not cover those earning £9 a week or less, or selfemployed people. Employer and employee each pays 41 per cent of earnings of between £9 and £15 a week. For example, a man earning £10 a week will contribute 10d., and so will his employer. This is in addition to his flat rate contribution under the present scheme, which is, in fact, slightly reduced.

Employers can contract out of the scheme in respect of their employees, but calculations become extremely complex and, even from just a strictly cash point of view, each case must be examined individually. The Noble Lowndes Pension Service, who have prepared

ESEARCH OFFICER of a memorandum on the National Insurance Act, are one group who



Spit and polish. A factory at Luton has introduced a new scheme to encourage its workers to care for their machines: each machine has a price tag on it. Many machines cost thousands of pounds -as much or more than an expensive car-and when the workers are made aware of this they take great pride in them. There is a constant spit and polish' drive, and during the last 15 minutes on Friday afternoons the machines are given a final polish and tools are laid out ready for the weekly cleanest machine' competition.

The scheme pays handsomely: machines better maintained, fewer breakdowns, fewer accidents, less spoilt work. Such schemes may not always be so successful. A farmer who ran a 'cleanest tractor' competition discontinued it because he found he could never get one to do any work on a Friday afternoon.



The Bulge. Unemployment in September fell by 22,000. Of these, 21,000 were boys and girls. This year 64,000 more children than last year reached the age of 15. It has been a sort of false start to the bulge proper which comes in 1961.

Altogether, in the bulge years about half a million additional young people will want employment, and the country badly needs them. But they will create a problem when they all come on to the labour market at once. (Not all 15-year-olds go to work but most do.) To help provide additional training facilities the Government has provided £75,000. This sum is being administered by The Industrial Training Council (see March of Business, p. 15). END



Miss Audrey Robinson of Belfast, Miss Secretary 1959. (See March of Business page 15)



BACK TO THE BENCH for N. Russell Gilbert, new export manager for Tickopres Ltd. In six months he must supplement his already extensive knowledge of guages and sales techniques by on-tre-job acquaintance with printing and engineering crafts as they relate to overprinting machines.

# contracts from the English Electric endorse the supremacy of



## VENTILATION

Time and again, industrialists large and small place repeat orders with Colt. And for three good reasons. Colt ventilation systems depend in the main on internal convection currents—not external forces and are therefore little affected by the vagaries of the wind. Colt offer an unparalleled range of ventilators. And most important, every Colt recommendation is based on a thorough analysis of the building, plant and process either from a site survey or drawings. Such thoroughness influences firms such as the English Electric Co. Ltd. It will impress you, too.

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Among the 12,000 major

Industrial Organisations using Colt equipment are:

15 contracts: Cow & Gate Ltd.

20 contracts: Courtaulds Ltd.

37 contracts: Vickers-Armstrongs (Aircraft) Ltd.

6 contracts: Smith-Clayton Forge Ltd.

29 contracts: National Coal Board

22 contracts: Lever Bros. Port Sunlight Ltd.



COLT VENTILATION LIMITED - SURBITON - SURREY - TELEPHONE: ELMBRIDGE 0161 (10 LINES)



IDEAS AND ACTIONS OF PROGRESSIVE FIRMS

Edited by William Hughes Ross

#### Vital statistics for employees

Large, brightly painted notices giving total number of orders in hand and comparing current output with a target figure, are conspicuous in each department at Creed, Croydon, manufacturers of teleprinting and associated equipment. The order position is emphasised to break down fears that operators are working themselves out of jobs if they exceed the target.

# They appeal to over-forties

Robinson Rentals, Bedford, facing a serious shortage of general clerical staff, advertised in the local Press: "Are you over 40?" Results were so satisfactory that the company will advertise again at the start of their next busy season. Accounting machine operators are given training at a London school—and this, too, helps to attract new staff.

### Dutch 'gen'

Britain has no plastics research institute and so Radio Heaters, Wokingham, makers of industrial radio frequency heating apparatus for plastics, have had to go to Holland for research into compression moulding. Experiments into such questions as press closing speed, platen temperatures, and pre-heating

temperatures and speeds will be carried out and the results made available to all plastic moulders.

The research mainly concerns phenolic moulding materials, but checks will be made on urea and melamine materials. The programme is expected to end early next year.

#### My mistakes—by the managing director

It is not often one has the pleasure of hearing a managing director of a well-known firm admitting a mistake in promotion of his company's goods. But that is what happened when T. N. Smith, of Alfred Bird & Sons, spoke to Birmingham Publicity Association recently.

Mr. Smith was strongly disagreeing with the theory that powerful advertising can sell anything and he instanced his own firm's experience with cakemixes: "We would have done better to spend more on market research—that would have saved money.

"There is no formula for making money in business—other than knowing the market and giving consumers what they want," he said. A marketing plan was essential for any product and the main factors to consider were nature and size of the market, creating the right brand image, methods of distribution, policy on terms and discounts, advertising, and pricing.

There were no rules for fixing a price. An

NOVEMBER, 1959



# 00000 teleprinters and punched tape equipment

#### TELEPRINTERS

TELEPRINTERS
For instant, accurate, twoway office-to-office communication of business data
— over any distance, bebetween any number of illocations. A single, nitial
transmission delivers data
at destination(s) in printed
page form, on multi-copy
stationery or as punched
tape for subsequent automatic processing.





EQUIPMENT Facilities for verifying, comparing, correcting, duplicating, combining and winding tapes-auto matically, at high-speed.



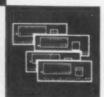
#### READERS

For continuous automatic telegraphic transmission of punched tape data at full circuit capability; for input of data to computers and other tape controlled equipment.

Record computer output— at speeds up to 300 charac-ters per second; create in-put data tapes (with or without simultaneous page print-out); provide auto-matic "common language" punched tapes of routine operations of cash registers, accounting machines, type-writers, etc.



CARD EQUIPMENT
Alpha-numeric punching
of data along edges of unitrecord cards and tickets
with simultaneous page
print-out of coded data;
automatic high-speed
conversion of edge card
data to punched tape for
telegraphic transmission
and/or further machine
processing.



Creed & Company Limited

TELEGRAPH HOUSE . CROYDON

SURREY



#### MANAGEMENT AT WORK

example was the introduction of home perms in America, where an increase in price helped to establish the new product. Questioned about the morality of this technique, Mr. Smith said that in a competitive economy such a measure could be only temporary. Very soon rival firms would undercut until profits were reduced to an 'ethical' level.

# Their exports beat strikes and competition

How is this for determination? Gestetner, North London, the world's largest duplicator exporters, had a consignment ready for export to America at Southampton docks when a strike forced them to recall the machines to the Tottenham factory. There the cases were specially redesigned for airfreight and an American cargo plane was chartered.

But at the last moment the plane was commandeered by the U.S. Armed Forces. Further delay was out of the question as plans for launching the new machines in the States were far advanced.

It was then discovered that an empty D.C.4 was leaving Basle, Switzerland, for New York, But by the time negotiations had been completed the plane was well out over the Atlantic.

Undaunted, Gestetners radioed the pilot and had him turn back to London Airport. Meanwhile, Gestetner staff had to re-label, load and move the consignment from Tottenham to the airport—all in four hours. At London Airport passenger seats



THIRD ATTEMPT to get exports to America ended in 'commandeering' a passenger plane.

were taken out of the aircraft and the machines loaded just in time.

Comment from the company: "Schedules must be maintained to overcome keen overseas competition."

# 5,400 pages copied in seven days

Sudden requests for an extra effort from one's employees often produces better-than-expected results. Take the office printing section of Esso, for example. They were asked to make 30 copies of a 180-page document in seven days. And the quality of original was too inferior for conventional photocopying methods.

The only satisfactory process seemed to be to make either Multilith or Rotaprint plates and run copies off on a litho machine. But seven days for 180 plates was impossible.

H. A. Fayers, head of Esso's print department,



**NOVEMBER, 1959** 

PARTITIONING—THE LATEST. New offices for Lewis's elaborate London store (left) are steel sheets bonded with grey, mushroom and cherry red plastic. Below is a more elaborate partitioning, called 'Cunic,' for showrooms and hotels. These are aluminium panels covered in wallpaper, fabrics, wood and plastics.





Salesmen are trained by Tack in Canada and Italy, Holland and South Africa. Eire and Belgium, Australia and Norway.

All over the world, the most successful salesmen are Tack trained.

Whatever the product or local difficulties, the unique Tack training means extra sales for thousands of companies.

#### it will sell more for you, too

Write now for full details on the 3 day Sales Training Course and the 2 day Refresher Course for Sales Executives to:

# TACK

**Organisation** 

Longmoore Street, London, S.W.1. VICtoria 5001

management at work

made rapid inquiries. These ended with a look at a new Shannon photocopier which claims to make litho plates in double quick time and at a fraction of normal costs.

The result? The machine was bought for £110—the plates were made in 48 hours at a cost, including labour, of £32—and the job was done with hours to spare. Thus, within two days the capital outlay on the new equipment was repaid. A month later the same machine saved the company another £300 on plate-making.



GOOD LIGHTING and dust-free atmosphere were demanded of this room at Solartron Research, Farnborough. Here pressure transducers, involving the assembly of parts so small that work has to be done with powerful microscopes, are made. To help to seal off dust, an illuminated ceiling was installed. Suppliers: SFIM, Slough.

# They explain electricity to Arab countries

THE USE OF electricity in Arabic-speaking countries has grown to such an extent that the G.E.C. have published a catalogue in Arabic. But this catalogue is also a handbook which tells a man with little training what earthing a circuit means, for example, or how a house should be wired.

The material was first written in simple English, then translated into 'ABC Arabic.' Line drawings make descriptions unmistakable. Finally the catalogue was set in Arabic and printed on a special, tough paper to withstand the rough treatment it will get on the job.

The reason for the new catalogue is that Arabspeaking countries, now that they have electricity, have a number of small electrical contractors. They need all the information and help they can get.

The catalogue is not intended to be comprehensive. It tries to achieve a high standard of installation

19/18 26

BUSINES

# CAPITAL can be a decisive factor

in expansion and progress. ICFC provides capital to small and medium concerns in Great Britain: in the form of share capital, and longperiod loans on fixed terms

> The booklet 'Capital for Business' will be sent on request



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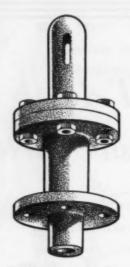
7 Drapers' Gardens, London, EC2 Telephone: National 8621/5

and branches in Birmingham, Leicester, Manchester, Leeds, and in Edinburgh

IV 8

#### management at Work

This boiler fitting cost thousands of pounds



This boiler fitting was supposedly doing its job as a low water alarm. It wasn't, and the resultant explosion not only cost the firm a boiler house, but a crippling loss of profits.

### — and two people could have prevented the accident

An accident like this, caused by a defect in the working parts of the apparatus, need never happen—if a qualified Engineer Surveyor regularly inspects machinery. But first it is the responsibility of someone at top-level—a director, the secretary or chief engineer—to see that all their industrial machinery is regularly inspected and properly insured by specialists.

**Vulcan inspects and protects** 

Vulcan, who this year celebrate a century of experience—and look forward to learning more every day—provide just such a service. It costs no more than in-

surance and inspection by 'general practitioners'. Our appointment is always welcomed by company engineers and insurance brokers—because they know that if defects are to be found, a Vulcan Engineer will find them, and prevent the accident that would have happened.



for all users of plant and machinery with reports of accidents and safety hints. Write to Dept. 4,

THE Vulcan 67 KING STREET MANCHESTER 2

BOILER & GENERAL INSURANCE CO. LTD.

work and to guard against dangerous mistakes because of lack of specialised knowledge. With the G.E.C. catalogue no contractor, however inexperienced, need go far wrong.

There is already a market in the areas concerned for such products as streetlighting, radios, domestic equipment and electro-medical equipment.

At first the catalogue will be sent to heads of governments and educational bodies in the Arabic-speaking world and to G.E.C. agents who will distribute it to contractors and dealers.

# Their accounting is 'in-line'



CONSECUTIVE DESKING at E.M.I.'s central accounts department, Hayes, has provided a three-way advantage: improved workflow, more accessible records, better use of lighting. Above is the new layout, below the old.





### Hot-Spa can — with a hot drink every 7 seconds Round the clock ... all year-round ... automatically

The modern, easy way to serve a tea or coffeebreak takes up little more floor space than the front page of your daily newspaper. It's true, the Ditchburn HOT-SPA occupies an area just 2' x 2' yet serves seven kinds of hot drinks at the rate of one drink every 7 seconds.

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HOT-SPA A fully automatic machine supplying a choice of seven delicious hot drinks — tea or coffee four ways, with or without milk, with or without sugar, plus hot chocolate and soups.

COLE- SPA The twin machine to the Hot-Spa, but serving a choice ial seven refreshing ice-cold drinks, such as orange, lemon, lime and cola, both sparkling or "still."

You simply dial your choice, insert a coin and the rest is pure enjoyment.



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#### MANAGEMENT AT WORK

# No secretary—but a machine can talk too

One disadvantage of a central dictating system—apart from depriving an executive of a personal secretary—is that it ties a man to his office replying to requests and receiving phone calls.

G. J. Lakin, office manager of Kuwait Oil, London responsible for services to some 300 people in Burgan House, London, who was faced with this problem had a telephone answering machine installed. This machine makes a pre-recorded



FREE FROM THE 'PHONE—G. J. Lakin, Kuwait Oil, London, is secretaryless. So he used to be tied to the 'phone, until he installed an answering machine.

announcement to callers and says that a message may be dictated which will be recorded immediately.

The machine has now become an integral part of the organisation providing 24-hours-a-day contact between the company and the outside world. Now Mr. Lakin is free to leave his office for conferences and to attend to the hundred and one other matters requiring his personal attention.

#### His clerks talk

#### -he listens

Air France have installed an electronic supervisory system in their London reservation department to improve the 'telephone technique' of the reservation clerks. The airline is laying particular stress on service to the public and the installation in London follows the use of similar methods in Paris.

The system enables the manager of the reservation department to listen in on any conversation between clerk and client and to record it. The recording can subsequently be played back to the clerk and the manager can then point out how he could have improved his handling of the call.

The manager can see when any one of the 35



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#### management at work

clerks are engaged by a master indicator unit in his office. A green light means the clerk is free to accept a call. A white light shows he is engaged. If the manager wants to listen in he dials a number and if he wishes to record a presses a recording key on an Agavox magnetic disc machine. When the disc is played back to the clerk it is automatically cleared and available for further use.



TELEPHONE TECHNIQUE is all-important in making seat reservations, say Air France. So while these clerks book customers' seats, the reservation manager can flip a switch and make a recording of the conversation. Faults are corrected, good points applauded.



# How many sales from inquiries?

What percentage of inquiries result in actual orders? Most sales directors would like to know and one—J. G. Window, of QVF, chemical engineers in glass, Stoke-on-Trent—has made an inquiry into inquiries. Latest figures show 73 per cent inquiries from the United Kingdom result in eventual business. Figure for overseas inquiries is much lower.

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It has long been obvious that greater use of adding/ listing machines can increase the work output in offices large and small.

Compare the utter simplicity of the keyboards of the Summa 15 and Elettrosumma 22 with any traditionallydesigned multi-key keyboard machine and you will find that Olivetti designers have improved the range of usefulness of adding/listing machines in the office while providing greater speed and output at a markedly lower total operational cost. Specially trained operators are not needed.

#### Summa 15

A simple hand operated sterling/ decimal adding machine, its price is well within the reach of businesses which previously could not afford mechanised help. Capacity 10 columns entering, 11 totalling. Addition, subtraction, credit balance, sub-total and grand total.

#### Elettrosumma 22

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BUSINESS



# The man in the frayed flannel suit

ITH the first of the new crop of 'business novels' arriving from the publishers it is an interesting exercise to ponder how true to life we expect these books to be. For, like it not, the man in the frayed flannel suit is emerging as the hero of today's fiction.

If the purpose of the business novels published so far is to give a true insight into big business, then the brand image they create is a poor one. Consider Jackson Pollett, hero—if that is the word—of the latest.\*

He is 'the boy-wonder of merchandising, whose obsession with getting ahead changed him from a likeable young man into a tyrant who climbed to power over the people he knocked down.' And when he is not climbing or knocking Mr. Pollett is pursuing—the hot-eyed, pneumatic young women with which the business novel traditionally abounds.

#### Boy wonder — take it or leave it!

What these girls are actually employed to do in the giant organization for which they and the hero work is never clear. But this, of course, is a tradition of business novels. Nor—and again this is tradition—is it fully explained why Mr. Pollett is considered the 'boy-wonder of merchandising.' As always with the business hero, his love-life is itemized in tremendous detail; but little attention is paid to his professional capabilities.

In short, our flannel-suited hero—as indeed they all are—is a cardboard man. We accept him—or we do not. But, then, we accept happily in other novels a cardboard Billy the Kid—who in real life was a nasty little psychopath called William Bonney from the wide-open spaces of New York city. We accept a cardboard James Bond, who bears no resemblance at all to the frail, nervous-eyed men who hung around at —— House during the war.

Perhaps—because we are involved—we expect too much from the fictional heroes of big business. John Prebble's gun-fighters and Ian Fleming's intelligence agents appeal because they entertain. These authors recognize that the reader is not interested in the mechanics of becoming a cowboy or a counterespionage agent.

\* The Big Company Look, by J. Harvey Howells (Michael Joseph), 16s. net, 17s. post paid.

NOVEMBER, 1959

So must we accept or reject the business hero on sheer entertainment value. And on this basis Jackson Pollett's creator has produced a winner; one even hopes for a sequel. Read it—it will take your mind off the business!

Investing for a Successful Future, by T. E. and D. L. Babson (Macmillan, New York), 34s. 6d. net. 36s. post paid.

This absorbing book covers the whole field of planning investments throughout one's life—insurance, housing, retirement and so on—but it concentrates on telling in a practical and highly readable manner how best to invest in the ordinary shares of various types of company. Although American, almost everything applies equally to this country.

The authors caution the would-be investor to get his objectives straight first, to decide whether he wants a minimum of current income (to avoid tax) with the earnings ploughed back into a strengthened company—in which case he should invest in 'growth' stocks—or whether he is after maximum current return, as provided by 'income' stocks. The executive is, of course, interested in after-tax income, whether from growth or income stocks. And there is a revealing comparison between two well-known firms, showing how after-tax income is affected by the methods they use to finance their growth.

continued on page 36

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#### BOOKSHELF continued

The dangers of trying to 'buy low and sell high' are clearly explained and the authors show why 'growth' stocks best meet modern needs. They actually show in great detail how to select suitable company shares-both 'growth' and 'income.'

Certain major materials, such as chemicals, drugs, electronics, glass and paper, are treated in detail to show end-uses and therefore industry and company growth prospects. This section itself makes the book worth reading for its general knowledge content. The brief summaries give the reader a clear, broad picture of these industries-for example, the major types of plastics and their uses-and the major companies which are strong in each field.

The authors arrive at general principles for ordinary share investment and assert-who will disagree today?-that bank accounts and government bonds cannot offset the higher cost of living due to inflation. In selecting the right stocks to provide a life-time investment, the investor should choose because he has faith in the future of the products, not because he expects stock prices to rise. They will certainly do this anyway if he has chosen well.

#### High finance or hard cash?

Canadian Economy in the Great Depression, by A. E. Safarian (Oxford University Press), 28s. net, 29s.

No country is an island, economically speaking. And Canada in the great depression was less insular than many, and this is one reason why she descended so far, but does not explain why she rose so slowly. In 1933 unemployment in Canada reached 20 per cent and national expenditure declined 42 per cent between 1929 and 1933. By 1937 expenditure was still 13 per cent below the 1929 level, whereas in the United Kingdom it was over 10 per cent above it.

The downswing was caused by the collapse of world trade, upon which Canada was largely dependent; by the severity of the collapse in the United States, to which Canada was closely linked; and by the failure of investment in Canada itself. It is almost impossible for any country dependent on world trade to take drastic reflationary measures in isolation. If it does it will succeed only in increasing its imports and losing its reserves.

This was the position in which Canada found herself, and it emphasizes again, for those who need to be reminded, the necessity of maintaining world demand. (It is creditable that the latest British budget took some risk with the balance of payments with the expressed purpose of helping to keep up world

continued on page 38



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BOOKSHELF continued . . .

demand. The great American foreign spending which has recently cost them gold serves the same purpose and it is to be hoped that it will continue.)

pre

Depreciation was a possible remedy (it would have reduced export prices) but there were considerable difficulties; "any unorthodox monetary measures were regarded with suspicion by the financial community and large segments of the business community, not to mention the government; and there was the likelihood of large capital outflows if confidence was seriously impaired." It is perhaps foolish to suppose that confidence might have been impaired by a 20 per cent unemployment rate, and a fall of 42 per cent in the national expenditure.

On the upswing of the cycle after 1933, with world trade reviving, Canada could have helped herself much more than she did. Government spending was necessary but was not undertaken. As the author put it: "Government spending was more stable than other components of expenditure, but it cannot be called contra-cyclical since both over-all spending and deficits fell as the depression continued." Meiosis can go no further. One of the most serious obstacles to reflationary policies was "the fear of unorthodox monetary experiments, and particularly the damage which might result from any loss of confidence in the Canadian financial structure." It was presumably more important to have faith in the financial structure than actually to have any finance.

#### Lessons from

50 years of selling

How to Outsell the Born Salesman, by Wm. IV. Frank and C. L. Lapp (Macmillan), 31s. 6d. net. 33s. post paid.

It is a pity the dearth of books on salesmanship by British authors forces us to import so many from America. Invariably we have to Anglicize the situations and emotions expressed and inevitably something seems to get lost in the process.

This American book, however, allows the 'translation' to be made fairly easily. It presumes you are a beginner and describes in practical terms the fundamentals of sales strategy, then develops into the technique of the expert salesman. A final section explains methods of making time on the job more productive.

The two authors bring more than half a century of experience to the book and state that while the principles enumerated are universal it should be of special interest to those salesmen selling insurance, cars, real estate, retail merchandize, and speciality items.

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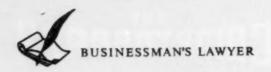
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NOVEMBER, 1959



# Guaranteed? Then look before you sign!

BERT BLACK is a progressive businessman, constantly buying new equipment to improve the efficiency of his large factory. "But every time I get a new machine there seems to be some form of guarantee attached to it," he told me doubtfully. "Is there some catch?"

To prove his point he produced a fairly common form of guarantee. As I suspected, in return for certain dubious advantages it also required him to give away rights he would have enjoyed in common law.

In simple language the form guaranteed the machine against faulty workmanship or materials for six months. But it added "During this period any components (except as hereinafter mentioned) which, in the manufacturer's judgment, have proved to be faulty or defective in manufacture, will be repaired or replaced free of charge if returned carriage paid to the dealer from whom the purchase was made."

Snag number one, I told Black, is that it is left to the maker to decide whether or not a part is defective. If he says that it is not, that's the end of it. Snag number two, you have got to return the goods carriage paid to the manufacturer before he will agree to do anything about it. And neither of these would arise unless you expressly agreed to them.

Then there were 10 specific limitations in the guarantee, which cut it down immensely. First the guarantee registration card must be completed and returned within seven days. Second, you must pay for the labour involved in replacing parts. And what a monstrous provision that is! The machine might go wrong because of a tiny part which cost the manufacturer twopence halfpenny to replace. But the customer has to send him the machine carriage paid and pay the labour charges involved in taking it apart to replace the faulty item.

Clause number three said neither the manufacturer nor the dealer would accept any responsibility for loss or damage to the machine in transit in either direction. So the insurance has to be paid by you.

Number four cut some of the most important parts of the machine out of the six months' guarantee, and substituted a three months' guarantee.

Number five said the manufacturer would not be responsible for wilful, accidental or consequential damage while the machine was in possession of the purchaser. Now what does 'consequential damage' mean? If one part goes wrong and as a consequence so do the others, what does this imply? Only the exclusion of damage caused by wilful or negligent actions on the part of the purchaser should rightly be provided for.

#### Signing away your common-law rights

Paragraph six stated that the guarantee would be invalid if the machine was misused. But what if it was misused as a result of faulty instructions? If you return the guarantee form that is too bad.

But the trickiest item was to come. There was a separate paragraph underneath which provided, that "this guarantee and these conditions are in substitution for any statutory or other warranties or conditions expressed or implied." So in return for the dubious advantages which you are getting, you are asked to give up all protection which you would otherwise have received from the Sale of Goods Act 1893 and otherwise.

"But doesn't this just happen to be a particularly unpleasant example of the contents of a guarantee form?" Black asked me.

"Indeed not. This form was sent with a most popular item manufactured by a highly prosperous company. It is typical of the sort of so-called guarantee which businessmen are invited to accept in substitution for rights which they would otherwise have."

I explained the Sale of Goods Act implies terms into contracts of sale of new goods, in the absence continued on page 42

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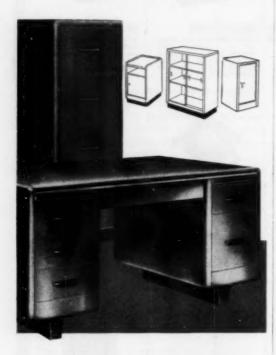
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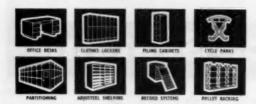
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#### LAWYER continued

of any express provision to the contrary. For example, there it is accepted that new goods are reasonably suitable for the purpose for which they are supplied and that they are of 'merchantable quality.'

If the goods are defective then the purchaser is entitled to call the whole deal off and return them. And if there has been a breach of warranty he is entitled to damages.

If you buy goods and they turn out to be useless, you don't have to return them carriage paid to the manufacturers in order to have them put right, I pointed out. He has provided you with a faulty article and it is his liability to fix it up or provide you with a new one.

And if there has been a breach of condition, you are not even bound to accept a repaired article, or a new one. You are free to say, "I have tried your product, and I don't like it." Nor do you have to pay the labour costs involved in putting the faulty machine in order. Why should you?

#### Giving up more than they give you

And it is up to the manufacturer to collect the goods and return them to you, and to accept liability for any damage to the goods in either direction. Why should you have to bear this risk?

And why should there be an exclusion of certain parts in the machine? Because the manufacturer knows that there are parts that are weaker than others, he tries to keep them out of the bargain. Why should you let him?

Of course, an answer to this would be that in return for giving up all these rights the manufacturer is conferring some other benefit. But when he gives you a six months' guarantee, are you getting anything more than you would otherwise have?

In most cases, if you buy an item of equipment and it goes wrong after a few months then it clearly was not of merchantable quality and it is up to the suppliers to put it right.

What's more, it's not left to their judgment to decide whether or not the fault was caused by a defect in manufacture. If there is any trouble it is for the court to make a decision.

"So your advice is—do not fill in and return guarantee forms?" asked Black.

"In most cases, emphatically not. You normally give up far more than you get. But there is one other possible way round it — and that is to cross out and

continued on page 44

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#### LAWYER continued

initial all parts you are not prepared to accept and then return it, along with any registration card or other required document."

"But are you entitled to vary the guarantee form by crossing out various parts of it?"

"Certainly. A guarantee form delivered with the equipment is an offer made by the supplier to vary the contract under which you purchased the machine. You are not obliged to accept it.

"You can reject it entirely by tearing it up. Or — if you are clever — you can strike out the parts you do not agree to and send it back. This will not amount to an acceptance of the guarantee by you. It will be no more than a counter-offer which the manufacturer can accept or reject.

"He is quite entitled to say: 'Sorry old man, this won't do.' And if he does that, then that is the end of the matter. But if he sends you the customary little note acknowledging registration of the guarantee form, then he accepts your amended offer. And then you acquire all the advantages that he offers you without disposing of all the advantages which you have otherwise."

#### Throw away the worthless ones

"But what about the clause which says: 'the terms or conditions of this guarantee may not be varied or waived except only with the manufacturer's written consent?'"

"There's no reason why you should not strike that out along with the rest. It is put there in the hope that it will bamboozle you. And normally it is quite successful in so doing.

"The average person thinks that the guarantee must be accepted or rejected in its entirety. He is quite wrong. True, if you do submit a counter-offer by sending in an amended guarantee form, the manufacturer concerned may refuse to accept it.

"This clause may amount to notice that the manufacturer will not accept any variation. But that is not what it says! In fact it suggests that the manufacturer may agree to vary the conditions. So really, this can be regarded as a very naughty attempt to put something over."

I added: "Mind you, I have nothing but praise for the manufacturers whose guarantees really do give you something—so read the guarantee forms with care. The worthless ones, vary or throw away. Those that really do confer advantages upon you, deal with accordingly. And always remember the golden rule—do not sign anything which you have not read and understood!"





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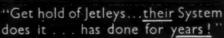
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BUSINESS



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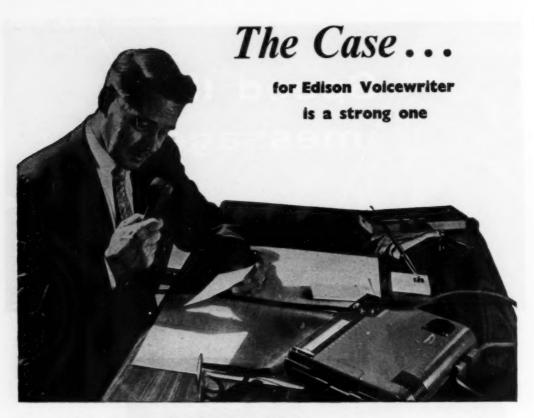
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to keep it waiting.

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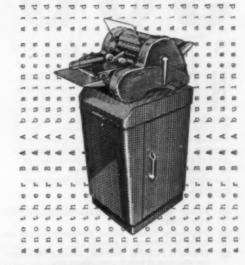
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NOVEMBER, 1959

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300

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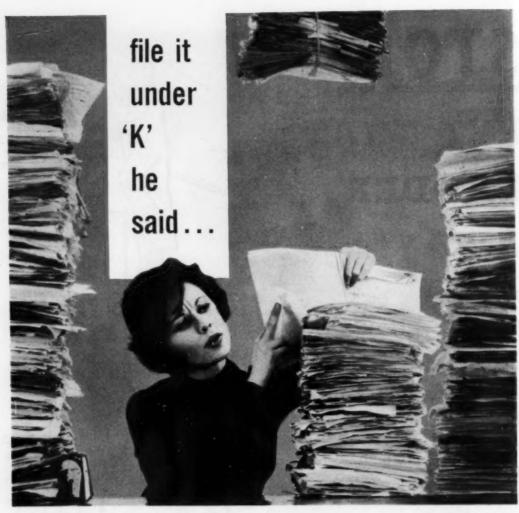
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Private telephone system. For five people, or fifty, or five hundred, it costs only a couple of shillings a week per phone. What's more, with the Siemens Ediswan rental scheme you have no capital outlay and no maintenance charges, and there are service centres all over the country. Ask us for more details, no obligation of course.





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The point is that in using ordinary stationery, each typist probably wastes a good half her time in making up each set of forms individually, interleaving it with carbon paper, and adjusting it in her machine. Primus Continuous Stationery does away with this continual stopping and starting. By making possible continuous typing on carefully designed sets of forms, it makes the work easier and faster, and the typist far less liable to make mistakes.

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# ASK FOR YOUR ELLIOTT REPRESENTATIVE!

He's there to help you. He's had a rigorous training to ensure that you'll get the machine you need-and-best of all, he talks the same language as you do-he's interested in giving you the best system for the lowest outlay. It's amazing how many office jobs an Elliott-Addressall system can do for you, accurately, quickly and cheaply! The Elliott-Addressall system is based on the Elliotype address card, which you type on your own machine. In fact, if you have a typewriter, you already have part of the system! You should look into it-our new leaflet is yours on request, or you can ask our local representative to make an appointment.

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COMPANY

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Headquarters of the Mitchell Cotts Group of Companies

Architects: Sir Giles Scott, Son & Partners



THE MODERN LINES of Harvey Desks create an atmosphere of orderliness and efficiency. In open offices, as shown above, desks are arranged back-to-back, the tops being separated by shelf units which provide additional working area without encroaching on floor space.

THE SUPERIOR APPEARANCE and versatility of Harvey Steel Furniture and Equipment is strikingly demonstrated in this important City building. Adequate provision is made for the individual working needs of all members of the staff, whilst maintaining a harmonious effect throughout.

The many units supplied by Harvey include single and double pedestal DESKS, CHAIRS of various types, FILING CABINETS, CUPBOARDS, LOCKERS and SHELVING.

Certain offices are furnished with the Harvey 'CONFERENCE' DESK—the desk with the big top—together with supplementary units from the '400 - Style' range — BOOKCASES, TELEPHONE STANDS, SLIDING-DOOR CUPBOARDS, etc.

Six extensive floors were converted into offices by means of HARVEY STEEL PARTITIONING.

Excellent use is made of COLOUR in providing ideal working conditions. The general scheme is Duotone Grey, with desk tops in Terra Cotta. The Grey enamelled chairs are upholstered in Black moquette.

Harvey Steel Equipment is adaptable to the most modern conceptions of office planning, and is built to a standard which ensures prolonged trouble-free service.

IF YOU ARE MOVING to new premises or wish to modernise your existing offices, ask for details of Harvey Steel Furniture and Partitions.

G. A. HARVEY & CO. (LONDON) LTD. WOOLWICH ROAD, LONDON, S.E.7

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SF/22



TYPISTS' DESKS, illustrated above, are designed for maximum comfort and convenience. They provide all facilities for typing, yet occupy only 7 sg. ft. of floor space. The side pedestal incorporates a pull-out flap, 5 stationery drawers and a locking cupboard for personal belongings.

STEEL PARTI-TIONS in Cotts House are mostly of the Barrier type, with glass tops, as shown right. Full-height partitions, glazed, were also installed.



NOVEMBER, 1959



#### "THE FINEST TYPEWRITER IN THE WORLD"

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BUSINESS

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#### Now the Hunt is for £3,000 Men

Quarterly Job Survey No. 4 for the man who is moving ahead-a BUSINESS exclusive, compiled by Charles Owen of Executive Appointments Ltd.

in demand-but the dedeserve a salary of £3,000-plus is greatest in the spring. This is one of the facts brought out by the executive job market survey carried out for BUSINESS during the past year.

vacant columns of a sample of leading newspapers have been analysed. The numerical results, broken down into quarters, are shown under five functional headings and against three salary levels in Figure 1.

The year's totals at each of the three salary levels and the five functions are presented in graphic

form in Figure 2.

The printing dispute occurred during the quarter ended September 30 and affected the space available for classified advertise-This accounts for the in the research category. smaller numbers in this quarter compared with the preceding quarter. Another cause is the summer holiday season, when many employers tend to hold off companies. These reports deal

ALES managers are always advertising vacant appointments.

After making allowance for mand for those who these factors the general picture suggests an increasing demand for executives during the year as a whole-no doubt a reflection of national recovery from the trade recession of 1958.

The rising demand has been Every week the situations for general and production managers and administrators rather than for sales and research executives. But by far the largest continuing demand is for research and production people.

Opportunities for sales executives in general have been fairly steady throughout the year.

One interesting feature is that vacancies for £3,000-plus men nearly doubled in a period of six months, reaching peak in the spring. And at the lowest salary level there has been a steadily increasing market, most marked

Another facet of the survey has been the reports rendered through Management Research Groups by a representative sample of

ion	30.9.59	•	48	300	357
strat	30.6.59	•	11	324	410
Administration	31.3.59	Ŧ	73	241	328
	31.12.58	10	2	174	238
	30.9.59	3	57	793	853
ch &	30.6.59	-	=	826	915
Research & Development	31.3.59	15	7	618	808
-0	31.12.58	*	2	609	677
90	30.9.59	=	8	187	294
Sales & Marketing	30.6.59	8	129	151	320
ω ω	31.3.59	25	122	309	356
Sales	11.12.58	=	<u>e</u>	3	252
	30.9.59	92	143	705	898
Production	30.6.59		136	8	946
rodu	31.3.59	a	151	910	783
-	31.12.58	•	2	451	563
	30.9.59	38	99	982	176
eral	30.6.59	2	93	38	232
Genera	31.3.59	n	2	. 77	183
	31.12.58	22	53	11. 62	108
Category	Quarter ended 31.12.58 31.3.59 30.6.59 30.6.59 30.6.59 30.9.59 31.12.58 31.3.59 30.6.59 30.9.59 31.12.58 31.3.59 30.6.59 30.9.59	£3000 upwards	00067-05417	05217-0527	Totals

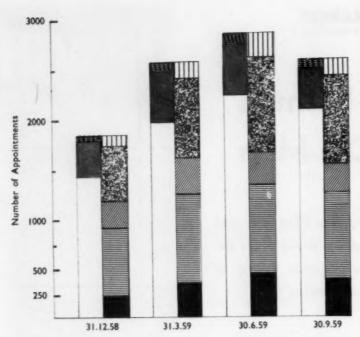


FIGURE TWO—At each quarter, column on LEFT represents total number of appointments at three salary levels. Column on RIGHT, total number of appointments in each category.

1111

£3000 + £1750 + £750 +



General Production Sales Research Administration

with appointments actually made and — assuming a time lag of three months between a post being advertised and a post being filled—the figures supplied by the companies have been adjusted to bring them into line with those obtained from the newspapers. This explains why the companies' figures stop short at June 30 (Figure 3).

The number of companies reporting averaged 22 and it is significant that externals (candidates appointed from outside) have shown an upward trend fairly similar to that already discussed.

These companies have also been reporting internals (promotions from within). And opportunities in this category have been remarkably steady over the nine-month period.

Executives who look to their FIG. 3

future inside their present organization will be encouraged to see that the total number of appointments made from within over the nine-month period is slightly higher than the number filled by outside candidates. In particular, they have a marked advantage over outside candidates at the £1,750 to £3,000 level.

Is this good enough? The one else will.

theory is strongly held by many business men that external recruitment of executives can be avoided by properly planned company schemes for management development and succession. To a great extent this may be true but it can only be wholly true in a static economy.

And the picture revealed by this report is of adjustment to new technologies and new marketing opportunities—expansion.

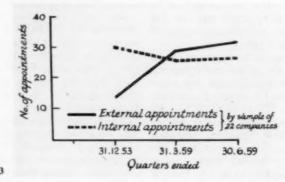
If suitable qualified or adequately experienced men for senior posts are not available inside an organization, they have to be sought outside, and quickly.

The effect of this, particularly in research, design and production, is to multiply industry's call on our educational and professional institutions for scientists, engineers and technologists.

In turn, the demand for general and sales managers, and for financial and administrative executives, also rises. Thus opportunities for executives, and the price they can command in the open market, are increasing.

This is well illustrated in the jump in top jobs which this year's survey has revealed. While many of these are undoubtedly new appointments, others are certainly existing posts, the salaries for which have had to be lifted above the £3,000 mark to keep key men happy.

More and more is the employer realizing that if he does not pay his key men well enough someone else will



66

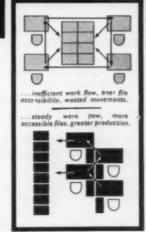
#### Make every square foot pay dividends!

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LONDONSWI	Address				

The government will shortly announce plans for the long-awaited Advanced Business School. Here BUSINESS proposes a new-look syllabus, tempering the theory of management with the hard-won experience of the men who manage

# Tomorrow's Managers— a new plan

BRITAIN IS TO HAVE AN ADVANCED BUSINESS SCHOOL. THIS DECISION—TAKEN BY THE CABINET BEFORE THE ELECTION—WILL BE ANNOUNCED IN THE NEAR FUTURE.

The school will be welcomed by everyone in industry. With one proviso—that it really does turn out useful executives.

A way must be found to balance the THEORY of management with the FACTS of industrial life.

Because of its unique position in the field of management BUSINESS has the confidence of both the teachers of management and the men who manage.

We believe both will welcome the views put forward here by a BUSINESS committee, headed by Dr. George Copeman—author of *The Role of the Managing Director* and a leading authority on management problems.



Two parts of the proposed syllabus are not at all radical. Every business school must cover the fundamental types of knowledge required by a business executive.

These divide into three classes—background subjects, the main functions of management, and the techniques and tools involved. As the Advanced Business School will be dealing primarily with students who have just completed a degree course, and have not any extensive experience of industry, these three fundamental classes of subject can be compressed into:

#### BACKGROUND SUBJECTS

Industrial Economics
Industrial Finance
Industrial Law
Industrial Psychology
Basic Technological Processes
The Social Framework of Industry

It should be possible to allow any student to obtain exemption from further study in any of these subjects if he has already studied them at first-degree level.

But the Advanced Business School should also cater for those who are already working in industry but have not taken a degree course. They could qualify for admission to the School if they had completed, at a Technical College or by external study, the intermediate level of examinations for the Diploma in Management Studies (under the Ministry of Education syllabus). Those who entered the School this way would also automatically qualify for certain exemptions.

Those who entered the School after taking a degree in Engineering or Science would probably

#### THE BIG DEBATE

Britain's Advanced Business School will be a major talking point throughout industry and commerce.

Who should represent industry on the faculty? Will it, in fact, play a useful role at all? Which university has the greatest claim to it?

These are vital questions, and BUSINESS will welcome your views

qualify for exemption from the study of basic technologies. On the other hand, those who entered the School after studying Economics, Law or Psychology, could claim certain obvious exemptions, but they would be required to study basic technologies.

#### TECHNIQUES AND TOOLS

Because most of the students will have had little or no business experience, it will be more realistic for them to study the techniques and tools of management in the course of studying its various functions.

Some tools of management—such as Statistical Method—are used in more than one function. In this case, they will have to be studied mainly within the function where they are most used. For example, Statistical Method would be studied mainly under Distribution.

It is proposed that the techniques and tools of management should be studied under the following functional headings:

PRODUCTION — Production Control, Routing and Layout; Quality Control; Operational Research; Work Study.

DISTRIBUTION—Market Research; Statistical Sales Promotion.

PERSONNEL—Interviewing Techniques; Job Evaluation; Merit Rating.

STORES—Stock Control Methods; Warehousing Economics.

GENERAL AND FINANCIAL — Financial Accounting; Budgetary Control; Standard Costing; Organisation and Methods.

#### BUSINESS BIOGRAPHIES AND HISTORIES

Now for the radical part of the proposed syllabus, designed to give students a practical understanding of management principles.

To appreciate the new proposals, it is worth while reviewing the main methods of teaching management, pioneered elsewhere.

Probably the best known is **Harvard Business** School. Harvard pioneered the case study method of teaching. This is their method of giving students an insight into the real problems of business policy and the real problems of establishing successful management methods.

A modified form of the Harvard case study is used at the London School of Economics, where a paper is presented each Tuesday evening to the Seminar conducted by Professor Ronald Edwards. This paper is usually written by a senior business executive or public administrator, describing the work of his firm or department, and some of its problems.

The Administrative Staff College at Henley-on-Thames has pioneered the syndicate method of management study. Each syndicate contains about a dozen members who have been carefully selected so that, between them, they represent a wide range of business experience—from production to marketing to personnel. Those who attend Henley for the 12-week course are already executives with a moderate amount of business experience.

At the Sundridge Park Management Centre, a special effort is made to fill the gap in executives' knowledge of methods of measurement and control. A four-week course is conducted under the title "Measurements for Management."

These pioneering methods of teaching management have had their successes. But BUSINESS proposes a radically new approach.

Teaching of management can be deadly dull unless it is related to living people and firms. Moreover, since it is essentially concerned with human beings, neither policies, principles nor methods of management can be fully understood unless there is some appreciation of the motives and personal circumstances of those concerned.

These can only be seen by studying the biographies of business men and the histories of business firms.

BUSINESS believes that in the Advanced Business School, the study of these biographies and histories should be conducted with five ends in view. They should give students an insight into:

The nature of business leadership, its sources of inspiration and its motives. (These are very different from military, civil service and other

continued on page 116

Delays from typing invoices held up their van deliveries. Photocopying cleared the lines

# 'Master' Plan Ends Order Troubles

by Tom Stone

S IMPLE changes in the methods of processing order forms at James Robertson & Sons, the marmalade and jam makers, resulted in: the saving of six typists, lower stationery costs, and the elimination of expensive delays.

The company used to send their representatives pre-addressed order forms for each retailer they called upon. The representatives made out orders on the retailer's instructions and returned the forms daily to the office.

There they were collated into convenient van loads by quantity, area and date of delivery and passed to calculating machine operators for the analysis of each load. These analyses served as loading schedules to instruct the dispatch department in assembly and loading.

As goods were assembled for loading, invoices were typed on four-part invoice sets, prices extended and totalled on adding machines, each invoice giving full order details. Except for those accounts where invoicing and

delivery addressing were different, all invoices were then passed to the dispatch department for delivery with the goods ordered.

Result of the system? An unavoidably erratic flow of documentation. Delays occurred in analysis. Detailed invoice typing was a slow operation.

In turn this imposed an uneven work-load on the assembly and loading departments. Overtime in invoice, analysis and order departments was almost standard practice and during busy periods the employment of additional labour was essential.

#### What to do?

After examining these problems Robertsons' executives decided to eliminate the typing of invoices and devise an inexpensive order-invoice master from which copies could be made quickly and cheaply. The cost of the master could not be high since certain wastage occurred in addressing and on calls when no order was obtained.

Certain reproduction processes were examined and rejected because of carbon staining.

Photocopying had an immediate appeal. Translucent masters offered the greatest clerical flexibility, were clean to use and inexpensive. They are also popular with representatives, can be handled as ordinary correspondence documents in the office and produce good copies.

Experiments were carried out with a number of photocopying machines from different manufacturers. All were diazo type copiers, employing semi-wet development. All proved to be unsatisfactory because stacking facilities for copies and originals were ineffective. Robertsoas found that the wetting of the copy in development was an almost insurmountable obstacle to efficient stacking.

Robertsons then turned to drydevelopment machines and experimented with the Ozalid One-Step. This machine uses ammonia gas as a developing medium and the company were doubtful about its use in a food factory. But on installation all doubts on the use of



No overtime, no delay, no extra labour and the vans get away on time. Photocopying machine - which replaced six typists - pays for itself.

ammonia gas were dispelled. The machine operates quietly and there were no complaints about the extended and totalled on adding ammonia. Stacking, too, was perfect, dry copies remained flat and automatic separation and development offered a great increase in the grand total of all invoices in output.

The order-invoice system has been only slightly modified to achieve a great improvement. The translucent order invoice master, complete with commodity details, is pre-printed on Durator paper on the company's offset litho duplicator.

These masters are pre-addressed on addressing equipment, as before, and sent to representatives as their 'journey control.' Representatives complete the quantity column for each order and return the master for collation and processing.

To speed analysis, a Logabax machine has replaced the six calculating machines previously used. Analysis stationery is pre-printed on translucent paper in order that four copies can be made on the photocopier for circulation within the assembly and loading departments.

While loads are being prepared the order-invoice master is price machines. As a cash check on correct loading information. analysis totals are compared with each load.

Thus, except for rare compensating errors, it is certain before the vans leave the factory that correct loading information has been given. Since drivers make up individual deliveries from palleted mass stocks in the van, it is important that correct quantities of each product are loaded.

#### The advantages

After checking, the extended order-invoice masters are passed to the operator who prints copies for invoice, advice, and delivery note. All copies are sent to the dispatch department for delivery with the goods and the master is passed, before filing, to the sales ledger department for posting. Provision is made in the master form design for photocopied credit notes where required.

Advantages of the new system?

- 1. Stationery costs have been 'appreciably' reduced.
- 2. Analysis is faster, time taken to document van loads reduced.
- 3. One girl handles all copying.
- 4. Services of six invoice typists are no longer necessary.
- 5. No overtime is necessary to complete documentation.
- 6. Work flow of documentation is smooth and assembly and loading delays caused by invoice typing have now been eliminated.

Robertsons' method of loading vans is worth noting: each van is provided with two doors on each side as well as a rear door. A rough sketch of the van loading is made on the reverse side of the copy loading analysis sheet which is passed to the driver so that on arrival at a customer's shop the exact location of each of the products that make up the customer's order is known.

Products are palletized in prepackaged half-dozen quantities so that it is a simple matter for any driver to make up orders on the spot.

# The Man Who Hated Paperwork



THE MAN—Long still designs much of his equipment, but in the early days he also made, packed and dispatched it.

I make things to sell, not paper to file, said Charles Long.

But now he thanks the experts who made paper

work for him. And in this interview he tells

'Business' how they did it

OWN The Hulton Equipment Co. Ltd., Lind Road, Sutton, Surrey, formed in January, 1946. We originally made shop fittings, window and floor display equipment, and so on.

We gradually expanded. We took larger premises, invested in more machinery, took on extra general engineering work. Now there are 30 men on the books. We do a fairly large business in quality wirework—counter displays, floor stands—and all in the national advertising market. But it was for many years a one-man band. I designed things, I estimated for them, I wrote out the invoices, I packed them and I delivered them.

I was able, while we were comparatively small, to keep my hands on everything. I was fully aware of every job that went through the works, every nut and bolt and piece of metal that we purchased and I knew precisely, at any given

moment, what was happening, what it was costing and whether or not we were coming out at a profit.

How did you know? Was it a comparison of your monthly bank balance from the blue to the red, or what?

By sheer rule of thumb.

But . . .

Now I must ask you not to interrupt me when I say "rule of thumb." After all, this whole discourse turns upon rule of thumb. I repeat, when you are a one-man band you are able to keep your eyes on everything. You know you must be making a profit because you are constantly expanding.

But one day I awoke to the horrible fact that I no longer knew what was happening. I had a works manager. He got work in, estimated for it, and carried it through. Sometimes I didn't even know the

job had entered the factory door. Here, I thought, is a point where I must pause because no longer can I control things. I don't know what this is costing. Well, again the one-man band comes into operation.

For a costing system?

Yes. I invented one. Very simple and straightforward, I thought, but it didn't work.

Why didn't it work?

Because some of my key employees, who had been with me for many years, thought this was just another of the old man's ideas. They pretended to co-operate, but in fact, didn't make a conscientious effort. As for the others, they thought of a number, probably added in the date, and the result was complete nonsense. And I knew it.

Surely you could have disciplined

Now you're showing that you

just have no idea how a small business works. It depends largely on mutual trust between me and my staff. I suppose they reasoned that we had always got along without it so why start a new system now? Later I discovered the system I thought was simple was much too complicated, anyway.

Surely you could have brought in an office manager to work out a system.

I am an engineer. And I make things to sell, not paper to file. Bring in an office manager—and in a twinkling he has a little empire of people filing, date-stamping, recording things in books, writing memos to everyone else. Up go the overheads. And it's low overheads that built up this business. No salesmen on the roads. A minimum of office work.

Who sells your stuff, then?

The 'phone. Rings all day. Personal recommendations and repeat orders, mainly. Quality and price are right, I suppose.

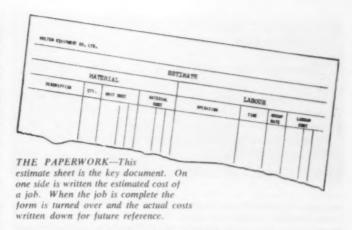
Who pays your men if you have no office staff?

I have an office staff—one man, and it's all I intend to have. My profits are made on the bench, not on a typewriter. He does all wages, P.A.Y.E., and so on. He also works the efficient costing and stores control systems which were eventually installed.

Now we're getting somewhere. So you do have paper and systems?

Only a few bits of paper now and an extremely simple system to do all the jobs required.

Who sold you on this?



In the end, I called in a firm which specializes in business consultancy for the smaller man. They soon devised an effective system.

Why does their system work when yours did not?

First, it's a better system. Second, they enabled me to sell it completely to my boys. Perhaps I should describe the two systems—then you can judge for yourself.

My home-made costing system consisted basically of job cards—the rather complicated type I had used elsewhere in far larger works. They started with the job number, took material into account and emphasized a precise labour time record, by far the biggest item of cost. A man was supposed to mark on the card that he started job number so-and-so at a given time and also when he stopped and switched to another. Everybody

had a daily time-sheet and the total hours on the time-sheet and all job cards should have always agreed. Of course they never did.

It sounds quite simple.

Yes, but I was astounded to find that many of my men, excellent at their job, could not tell the time or forgot to fill up the card. Later they would say: "Let me see, I started that job 15 minutes ago." In fact, they had been on it an hour. So, all unawares, they sabotaged my costing system. Luckily, my knowledge of the job told me this. And, of course, there was no stores issue tie-in. To make matters worse, I had no effective control over break-down time, waiting time and odd jobs.

What did this consultancy organization do?

First, I insisted they come on a Saturday, when the works are closed. It was more convenient and didn't create any unrest in the shop. I would have had to explain, and that would have set up a resistance to anything these people suggested.

They came to my works and asked to see all the forms and bits of paper that were relevant to the procedures for getting a job in, through, and out of the works. I produced eight or nine different forms—the usual order book, works orders, job card, time slip, invoice, dispatch note, label, etc.

Then one of my visitors saw some forms on a shelf and asked if they should be brought in too. I realized I had forgotten about them



Mutual trust between Long and his employees is the cornerstone of his small but growing business. And the consultants' report enabled him to 'sell' the new system to them.

NOVEMBER, 1959

#### SPECIALLY FOR THE SMALLER FIRM

Small firms need help most of all. Often they have grown from one-man businesses, like Charles Long's. Their directors know all about getting orders and managing production, but what about costs and control? So we asked Mr. Long about his experience with a new Business Services Division, recently established to assist smaller companies.

and soon we had quite a collection. I was horrified to find that there were no fewer than 14 bits of paper on which people were busily engaged in writing things all day!

The best thing my visitors did was their report—clear, simple straightforward, without any of this incomprehensible management consultancy jargon that gets in one's hair. I can't tell you all it says because it is too detailed, but I can give you the broad outlines.

First, they showed how a simple duplicate note book could be used for requisitioning material against a job number. The original went to the job costing file, the duplicate was posted to a stores ledger for stores control. The minimum-maximum stores holdings took the headache out of purchasing and cut down the supplies we had been carrying unnecessarily.

Second—and this is delightfully simple—they showed how, on one

form, an estimate can be instantly compared with the actual cost of a job. They took my old estimating form and redrafted it, showing material cost on the left and labour on the right.

Of course, the brilliant part about it was that on the back of the estimating form they set it all out again rather in reverse, to show the actual cost. So on the one side of the form you write down what you hope is going to take place and eventually you turn the card over and write down the horrible story.

When an estimate for a job is made, the estimate sheet is put on one side. If we land the order, a job file is opened, bearing the specific number which every job is allocated. All documents—estimate form, time slips, material slips—bear this number and are eventually placed in this file. Then when the order is delivered, all the data from all the documents is entered on the reverse of the estimate sheet and we can see just how much of a profit or loss we have



#### FOR INFORMATION

about the methods employed by Mr. Long, write to BUSINESS, Mercury House, Waterloo Road, S.E.I.

made on that job. If we are in doubt, we can cast up a daily or weekly progress cost as we go along.

This whole process of investigation and alteration to your existing system must have caused an awful upset, not only as far as you were concerned, but to your operators on the floor.

There was hardly any inconvenience. I gathered my four key men together and I told them that I had been forced to do something about this costing system. I said I had called in a study group. I then gave them each a copy of the over-all report and also a copy of the portion of the report which specifically applied to them. I suppose you'd call them job specifications. I pointed out that, of course, the system couldn't go into operation immediately-that we must have some sort of dummy run to iron out any difficulties.

The first thing was that my store-keeper, a very zealous type, interpreted his part of the report literally—nobody could touch anything in the stores. In effect, he was asking for a stores requisition for a sheet of ordinary notepaper. Of course, I quietened him down. I explained that, while the report had to be actiered to, they must employ common sense.

Did you have to buy much new equipment?

See for yourself. A stores control ledger costing £3 to £4, a few concertina files and some duplicated forms. I got most of this from a shop up the road. Most of my old forms were thrown out.

Were there any problems for the operators?

Not really, because what the system does is to provide me with

information about what a man is doing and doesn't affect his work as such. The only problem we had was with the time costing slips where a man had to fill in his name. the job number, sometimes the operation he is doing and the times of starting and finishing the operation. It appeared that quite a lot of young people are incapable of telling the time and what they wrote down bore no relation to the truth-or even common sense. I overcame this by installing a small time clock in the centre of the main shop to punch the time slips in and out during the day. The only other trouble was with those few people who start on a Monday morning. are tired of the job by Tuesday night and want their time, as it were. You must have the system so watertight that even these types can be made to conform.

#### Throws up waste

Aside from costing and stores control, has the system produced any other advantages?

Yes. Where a person has clocked on for nine hours, according to his personal time-card, his time-costing slips for that day must total that amount. Of course, there will be times when he is waiting for a job. That is taken care of in the system by what the report set up as a "Labour Variation Factor."

If the Labour Variation Factor figure is high for one week, it shows that for some reason or another, we were allowing waiting time to occur. There must be occasions when charge-hands are busy for just ten minutes and cannot get the job going. It is unavoidable. But the system does throw up this amount of wasted time and you are able to go to the people concerned and do something about it.

Does this Labour Variation Factor include odd bits of things like polishing the boss's car?

Yes, but under the system it is controlled, because standard job numbers were allocated for all non-productive jobs. For instance, there is one for transport maintenance, one for machine maintenance, one for setting time. Thus they are all picked up readily, either individually or collectively, every week, as a percentage of total man hours worked. By finding,

eventually, the average Labour Variation Factor, you include it on any estimate.

Any other advantages?

It's rather difficult to say. Certainly one thing is beginning to show up-a sort of memory about jobs. Hitherto when we have estimated for a new kind of job, we've probably had no records to refer to and if memory fails, you guess. The system has only been in operation for eight months, but already when we get a certain type of job we can say, "Ah, yes, we did a job like this for So-and-So a few months ago." We turn up the estimate and find that perhaps we had just come even. Now we build that information into our new estimate.

Well. Mr. Long, for a man who professes to hate paperwork you certainly make it work for you.

There you have the key. Too many people have elaborate systems where simple ones would do. My basic interest is in design and production—and keeping my costs down. When paper earns its keep by making my job easier, I welcome it.

#### Next Month

#### MAN WHO CUT A TOWN'S PRICES

Hit by supermarkets and chain stores, small traders seized on Bill Smith's plan fur a cut-price campaign.
Result?—100,000 EXTRA

Result?—100,000 EXTRA customers flock into Bexley, Kent every week and the whole town is booming. First full report of this remarkable experiment.



They broke the record 'ring'



You and your salary see this issue, page 85

DECEMBER BUSINESS' on sale December 2



At this 'board' meeting office girl and factory hand exchange views with senior executives. Man in the middle: company chairman, Robert Best.

## Free Speech Kills The Slump Bogy

by Owen Webster

O-PARTNERSHIP schemes take many forms. Some look well on paper, but are little more than an elaborate means of neutralizing the would-be agitator. Others consolidate the loyalties of the employee by giving him a spurious sense of importance.

But a fruitful compromise, in which the worker is genuinely treated as a co-partner, with a degree of power commensurate with his individual value to the firm, can be successful—such a scheme is in operation in the factory of Best and Lloyd, of Handsworth, Birmingham.

The chairman, Mr. Robert Best, is under no illusions about how far he is prepared to waive ultimate management control. Legally, he still retains the major part of the power—but nevertheless he is able to give his employees a large measure of self-determination. And

**\(\begin{align} O-PARTNERSHIP** schemes he has never yet had to use the take many forms. Some theoretical right of veto.

The firm is an old family business, now nearly 120 years old, manufacturing industrial and domestic lighting fittings in batches varying from singles to several thousand. There are about 80 employees, and the work varies from bespoke craft work demanding a high degree of skill to contract work of a light engineering character.

#### Every six weeks

Mr. Best has been chairman since the death of his father in 1925, but until 1949 industrial relations were never very good. A consultant was engaged when the company was losing money during the thirties, and rather ruthless reductions of staff were effected.

power—but nevertheless he is able to give his employees a large measure of self-determination. And been praising his employer, "that tive of the management at any group meeting been praising his employer, "that tive of the management at any group meeting for a special purpose.

in the old days before I came here the governor was a real so-and-so."

The events of the thirties were not forgotten 20 years later, and the first experimental months of a new worker-management relationship met widespread suspicion.

This was the atmosphere that greeted James J. Gillespie, author of Free Expression in Industry, when Mr. Best invited him into the factory as a consultant. He remained for about a year. And for the first six months he listened to a great deal of informal discussion in which employees were able to get their real or imaginary grievances out of their systems.

Gillespie's system of 'free expression' was introduced by dividing the firm into three natural groups — foremen, 'non-charge-hands' and office. No representative of the management is present at any group meeting unless invited for a special nurpose

#### Memories of the depression died hard in this family firm until the boss decided to let his men talk their suspicions away. Result? a 'marked improvement' in output per man

Each group meets in the works canteen, usually on successive days about once every six weeks. Their meetings last officially an hour, but often last longer. There is an average attendance of between 12 and 18. Mr. Best finds that some of the longer meetings have been the most helpful and productive of sound ideas. The meetings are held in the company's time: directly after lunch.

Each group is given whatever help may be needed in the form of secretarial work, preparation of agendas, minutes and so on; and each is free to discuss or criticize anything its members like. In fact they voluntarily confine themselves to topics relating to the firm and their place in it.

Each group elects its own chairman annually and also elects a representative (who need not be the group chairman) to sit on a management board, which discusses and takes decisions about all matters which ordinarily come before a board of directors in a private company. The only exception: wages and salaries.

Mr. Best is the board chairman and, in addition to the three elected group representatives (foreman, operative, office worker) there are the four functional executives, company secretary, sales manager, production manager and chief designer.

The board meets at 4.30, during working hours, and although payment for the time taken beyond normal working hours has been offered on more than one occasion, it has always been refused. Mr. Best sees this giving of time as a valuable factor in the creation of the 'permissive' atmosphere that exists at board meetings. They last up to three-and-a-half hours with sandwiches and a cup of tea.

A tape recorder is at hand at each meeting, and recorded dialogue is transcribed where appropriate in reports of the meetings

published in the cyclostyled B & L. News, circulated to all employees.

Each point raised at a small group meeting is recorded, and the outcome of any recommendation made to the board can be followed through to the report of its meeting. The board reports usually form the basis of the ensuing group meetings.

#### **Projects list**

Each management board meeting contains reports from the chairman (trading conditions, output, orders received, etc.), the sales manager, works manager and chief designer.

There is usually a discussion of 'projects'—that is, all expenditure on new plant, machinery, repairs and maintenance. These are discussed by the small groups, which are given particulars of estimated costs. Their comments and suggestions are often of great value, Mr. Best reports.

The June issue of B & L News this year, for example, records a member of the foremen's group saying that it would be more economical to have two motorized lathes in the polishing shop instead of the 10 h.p. motor which was then being used to pull one spindle. One lathe was practically useless and needed replacing.

Taking up his point at the board meeting, the works manager thought the time was opportune to give this serious consideration.

The non-chargehands' representative said: "I don't think it would save a great deal having two 3 h.p. spindles. What you pay for is mostly proportional to the load. One lathe is in a very bad condition but if the company don't want to complete the scheme in one financial year, probably the best alternative would be to buy one motorized lathe and replace the motor by a smaller one, which I have in store, to drive another

spindle. We could complete the scheme another year."

The Works Manager replied that the two motorized spindles would cost about £170. "I always thought," he said, "that the polishers preferred to have the belt-driven type of machine for sanding." At which he was told that the foreman polisher had said it didn't matter. The meeting agreed to put the subject on the projects list.

The result is published in the following issue of B & L News. A member of the foremen's group (presumably the foreman polisher) is reported as saying that the lathe already in the polishing shop needed only two new spindle ends—and the board reports that they had approved "a suggestion from the foremen's group that two new spindle ends and one new

#### Next Month

#### MAN WHO CUT A TOWN'S PRICES

Hit by supermarkets and chain stores, small traders seized on Bill Smith's plan for a cut-price campaign. Result?—100,000 EXTRA

Result?—100,000 EXTRA customers flock into Bexley, Kent every week and the whole town is booming. First full report of this remarkable experiment.



They broke the record 'ring'



You and your salary see this issue, page 85

DECEMBER · BUSINESS on sale December 2



Free speech scheme proved extraordinary intelligence' of workers.

instead of two new lathes."

Many similar examples of a satisfactory solution to a problem demanding improvement and economy can be found in the files of B & L News.

"I have found people extraordinarily intelligent about what is good or bad for the business," Mr. Best "Some of the things told me. managers wanted to do have been greatly altered by being opened up to criticism, and they've been more successful as a result."

In the early stages, he said, many people on the workshop floor were suspicious. It took years before all the suspicions and bickerings were no longer serious. Now, they have practically ceased.

He regards a profit-sharing scheme as an important-but not essential-constituent of any copartnership scheme. It sets the seal on the genuine co-partnership, he says.

The firm introduced one in 1950, with one week's wages paid to all the employees as about a half share of the company's profits after allowance for development, depreciation, etc. In subsequent years, co-partners have received the following amounts: -

> 1951 - 3½ weeks' wages 1952 - 21 weeks' wages 1953 - ½ week's wages 1954 - 8weeks' wages 1955 - 4 weeks' wages 1956 -- 1 week's wages 1957 — 1½ weeks' wages 1958 - 51 weeks' wages 1959 - NIL.

Employees are still smarting under the disappearance of their

motorized lathe would fill the bill 1959 'profits.' They had come to rely on their share for holiday money.

> One of them, introduced by Mr. Best at lunch in the canteen, wanted employees to be shareholders-on the lines of the ICI system.

#### Free speech

He argued bluntly: Was it really true that there were no profits to share out? " If we were shareholders there would be a legal obligation, more binding than a mere promise, to share out whatever profits there were."

Mr. Best, who always eats in the canteen, explained that external circumstances, such as trade recessions, had delayed effects on the business. In this case the credit squeeze of a couple of years ago had taken its toll.

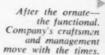
But for the rest of the conversation, he listened in silence. enthusiastic and uninhibited way workers discussed the firm, irrespective of whether the chairman was present or not, was certainly impressive.

As Mr. Best has said: "When we started this experiment in free expression ten years ago, many people believed-and may still believe - that operatives and employees were generally irresponsible. Surely, if we have done nothing else during the last ten years, we have demonstrated that this is not true. . . . "

When the profit-sharing scheme was first introduced, many of the older men who had been in the firm for most of their lives thought they should have a larger share of the profits than junior employees.



Standards and skill have been unchanged for 120 years. But 1959 calls for a different approach to the company's labour relations





78

A certain amount of friction from this and other 'generation' problems is still detectable. The younger ones were eagerly waiting for the old men to retire—they found them too cautious in their criticisms of the management, too unwilling to support unpopular demands.

But another source of industrial friction, the office-works conflict, is now no more than a topic for friendly leg-pulling, though the adjustment took some years.

At first the works tended to look upon the office as a parasite they were forced to carry. They timed how late the office staff arrived in the mornings and even how long they spent in the lavatories.

Through the groups, the office asked their critics to pinpoint their complaints. Then the two sides met to study facts. Office procedure was explained, the works were told why it was not possible to issue job cards for office work, and their report published in B & L News. That was in 1952. There have been no serious echoes of the conflict since.

The decision to equip a works canteen was taken after a ballot when estimates of cost and tenders from catering firms had been fully discussed. Though opinion on the board was divided, the result of the ballot was accepted.

After a year, the small groups pressed for the catering to be taken over by an elected canteen committee, which was to have disposal of any profits. Another ballot, asking if they were prepared to take responsibility for a loss, resulted in a canteen committee being formed.

The experiment was successful. In Mr. Best's opinion, the experience of business administration, with accounts set out on the same lines as those of the parent company, has been of great educational value.

Annual holiday dates are also the subject of ballots. Today, a movement is beginning among the operatives to try to persuade the management to arrange for staggered holidays, instead of having the whole factory closed for a fortnight.

Although most of the workers are union men, the firm has not

experienced a strike in recent years. Good industrial relations are preserved through the groups, and good personal relations ensured by Mr. Best.

"In my last job," said one man, "you had to knock the governor over before he'd speak to you. But Mr. Best has a word for everyone, no matter who he is."

But in spite of all this, it is still the leader, the articulate man of courage, who accepts re-election to the management board. The fear of victimization is still present. As a veteran member told me: "If there's an unpopular decision or a vote against you, you're unpopular with your workmates. If you stick your neck out too much on the board, you're likely to get victimized by the management."

#### No victimization

Challenged with this, Mr. Best did not deny that an executive might feel some unconscious dislike of a man who was wont to make a nuisance of himself by being too vociferous on behalf of his comrades. But he left me in no doubt that there was no deliberate victimization.

Such matters, it seems, are problems of human nature. They are certainly not spanners in the machinery of an experiment that can now be said to have reached the point of being no longer experimental, but an established pattern of industrial relations. Mr. Best's conclusions about it can be summarized as follows:

It has made employees more cooperative: they are now willing to move from one job to another. There has been a marked improvement in the quality of the product. For this the company depend entirely on operatives' and chargehands' goodwill for maintaining high standards in a product which is particularly subject to technical disasters.

An increase in output per manhour: a conviction that the nature of the product makes it difficult to prove. There is no resistance to joint job observation or the introduction of new labour saving devices.

There is a responsible and wellinformed approach to the management of the business by at least 20 to 30 per cent of the employees.

There has been a marked change for the better in the expressions of people's faces and the tone of their voices.

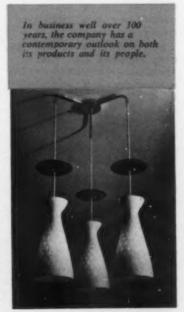
Mr. Best admits that the managing director gains more power than ever before under his system. But now it is 'power with' rather than 'power over' people.

There is no industry, he thinks, into which free expression cannot be introduced on similar small-group lines. Small companies and large-scale industries can usually be found to break down into natural units for free discussion.

"I believe," he said, "that a fundamental factor in democracy is the right of free assembly. In a factory run on orthodox lines there is plenty of assembly and group discussion, but it is not free and a lot of it goes on underground.

"Even where there is a joint consultative committee it can seldom be said that the facilities for reporting back are adequate.

"But the initiative and responsibility for working this small-group system must derive from the chief executive. Unless he wants it to function, emotionally as well as intellectually, nothing can prevent failure."





Built for British business - the six-seat Hunting President.

#### This year 40 British companies decided to buy their own planes. Does executive flying pay? Here are the facts

the air. To keep up with the pace of business life, today's top executives tend to rely more and more on the company plane to get them to top-level conferences and to clinch big sales.

Mostly the plane is hired, but many firms now have their own. The number of aircraft used by big business grows each year. Today 448 aircraft are registered for business and private purposes and this year alone about 16 have been bought by business houses and almost double that number ordered.

And plane manufacturers, aware of the trend, are laying out red carpets and opening cocktail

What are the costs of flying compared with road and rail travel? Flying can be surprisingly cheap. Suitable British aircraft are generally large and demand a relatively high initial outlay. But Italy's latest-the Piaggio 166-can be

RITISH business is taking to lated over as little as 200 hours a

With all four seats occupied, and flying 400 hours, the cost drops as low as 4½d. a passenger-seat mile. And this includes maintenance, depreciation, landing charges and pilot fees. A similar aircraft - the American Cessna 310C - costs almost exactly the same.

To buy a Cessna takes £30,000; the Piaggio costs £35,000. But if

#### by Arthur Sitwell

these figures turn your chief accountant pale then the plane can be hired.

The civil engineering firm of Sir Robert McAlpine is the latest firm with plans to 'break into fastexpanding business flying' by leasing its aircraft at a set fee per flying hour.

McAlpine have 14 years' experioperated at 2s. 4d. a mile, calcu- ence of flying directors and senior

staff all over the country. Several of the directors have grass landing strips adjacent to their homes.

The mobility of the flying executive can be seen from this company's log of flights over the past few years: 1955-380 flying hours - 530 flights; 1956 - 429 hours - 601 flights; 1957 - 430 hours - 687 flights; 1958 - 533 hours - 951 flights.

And for the first six months of this year the figures were 285 hours - 594 flights. Note the big increase in flights compared with the small increase in hours-due, of course, to faster speeds.

Examples of how these fasterthan-ground directors get around is shown by these case histories:

An aircraft took off from Luton Airport in time to pick up an executive at Rochester by 9.30 a.m. He was flown to a Gloucester construction site, then taken to Oxford for a business meeting, on to Bristol to inspect another building. and then to Cardiff in time for

dinner. Ground time-two days!

A London firm has a main factory near Glasgow. So frequent was executive traffic between the centres that three seats were booked permanently on the London Glasgow BEA service. Inevitably there were many times when important duties in London kept the executives from flying to Glasgow, so seats went unoccupied.

Cost to the company—£16 return per passenger, plus the time required for getting the executive to London Airport. With their own plane they obtained muchneeded flexibility—and saved many executive hours at a cost of £21 10s. return.

But while it is easy to hire or buy a plane, difficulties arise when it comes to flying it. There are 200 airports scattered across the country, many of them so far from major towns that the road journey to the centre of the city can take as long as the flight itself.

It is not possible, for example, to land at London Airport without Ministry permission—in triplicate. Hendon and Croydon airports, admirably placed on either side of London, are closed to civilian flying. The nearest airport to the capital is Elstree—almost an hour's journey out of town.

Another problem is the limited air space over Britain. Large air channels patterning the sky are more or less the prerogative of the large airlines and military aircraft. The comparatively slow-moving business planes are about as welcome as a cyclist on the A1.

Nearly all these objections are overcome by helicopters. Although they do not compare with fixed wing craft for speed and operating cost, they nevertheless have their own particular uses.

Their ability to land in small areas makes airfields unnecessary and often means quicker travel from city centre to city centre. With helicopters there are less formalities involved so that it is possible to land on the roof of a factory or on the company's lawn.

While few British firms have their own helicopters, a large amount of executive travel is being done on a hire basis. Westland Widgeons, operating from the Heliport on the Thames, are under almost constant charter to businessmen and many flying hours are being amassed this way.

#### **Britain lags**

But whether the executive of the future flies by plane or 'mixmaster' it is unlikely that he will put in as much flying time as his American or Continental counterpart. Business flying—although on the upsurge here—is relatively undeveloped compared with most other industrial countries. This unfortunate state has resulted in British aircraft manufacturers forsaking the home market and leaving ripe pickings for foreign companies.

Even if the British manufacturers

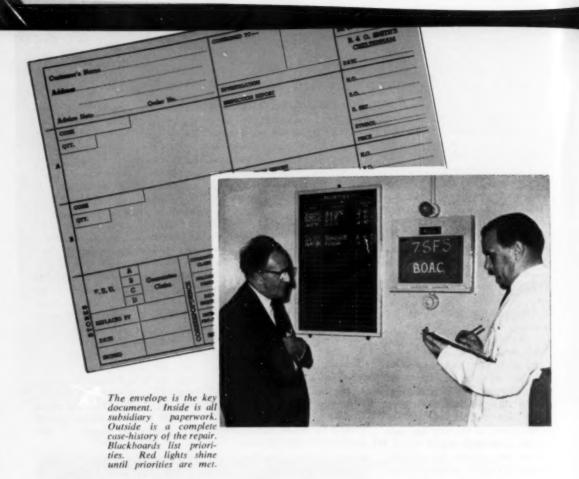
While few British firms have realized the market now they eir own helicopters, a large would still be four to five years mount of executive travel is being behind their foreign competitors.

Only British planes suitable for the business market today are the de Havilland Dove (twin engines, 6-8 seater) which is a 13-year-old model and costs £40,000; the de Havilland Heron (four engines, 10-seater), a seven-year-old plane at £70,000, and the Hunting President (twin engines, 6-seater) which has been developed from a 1952 military aircraft and costs £60,000.

Big business's new interest in air travel could do much to boost private flying in Britain. It could also open up a profitable market to aircraft makers.

But industry should not have to carry the whole burden. There needs to be a change in government policy, which in the past has been one of obstruction and which has held back the natural growth shop window for herself.

COMPAN	Y AIRCRAFT	The second secon	HOUR per yes	-
United Steel	Piper Attacho and two-seater Auster. Con- templating purchase of eight-seater.	Interworks travel and to Continent; also transporting important customers.	500-400	One pilet, one fitter/ rigger.
C. A. Parsons	de Havilland Dove	Saves time and travelling strain.	450-500	One pilot. One naviga- tor pilot.
Fox Glacier Mints	de Havilland Dove and Dragon Rapide	Visits to Northern Ireland factories.	400	Full time pilot, full time mech- anic, one part-time pilot.
Ind Coope	de Havilland Dove	Quickest way from A-B.	700	One pilot, one licensed engineer.
Sir Robert McAlpine	Piaggio P.166 and Piper Attache	Viriting sites and attending meetings.	550	Two pilots.
Ferranti	de Havilland Heron	Interworks travel Edinburgh, Man- chester and Londo		Two pilots, one radio navigator.
Dunlop	Auster Autocar	Liaison with aircraft manufac- turers who are customers.	200	Aviation Division's pilots.



#### Speeding Repairs — with String and Brown Paper

by Office Editor, Laura Tatham

Tie-on tags and 'case history' envelopes end the problem of paper bottlenecks in this well-known firm

This is no coincidence.

The aims of both organizations are similar: to get the 'patient' back into circulation as quickly as possible; to establish a logical system of progress from diagnosis through treatment to discharge; and to provide an efficient system of documentation which ensures that full information is immediately accessible to all who need it.

At Smith's the key document is

HE repairs department of a brown-paper case-history Smith's Aircraft Instru- envelope. Entered on the front of ments, Cheltenham, is this envelope (known as a mail reminiscent of a well-run hospital. sheet) are the 'personal' details of the individual instrument and the complete history of repair. Inside are all the supporting documents.

> This method, and the subsequent orderly system of filing, means that all details are available at any time during the repair process and for many years afterwards.

> Here are other outstanding points of Smith's repair system:

Once the instrument is registered in and preliminary

entirely independent of the progress of documentation.

- A simple marking system indicates on which day of the week a repair is received. All are therefore automatically dealt with on a first come, first served, basis. Only exemptions are urgent orders.
- For urgent orders (which may be keeping an aircraft grounded) there is a special procedure. This ensures that the item automatically receives top priority.
- Each instrument has a type code number by which it is unmistakably identified throughout the repair transaction and at any time afterwards. This number appears on the work ticket tied to it; and on every document relating to the repair.
- There is a separate index of customers filed by name, but with a separate card for each type of instrument received for repair.
- Where operators enter into an overhaul agreement with the company the scale of charges for repair is standardized and graded in accordance with the degree of work required. This completely cuts out the need for separate estimates.

#### Checking in

An instrument for repair is received first in the checking department. It is at this point that the key document - the case-history envelope - is made out. Each mail sheet has a serial number printed on the top right-hand corner. This number identifies the instrument throughout the repair transaction.

The entire surface of the mail sheet, which measures 10½ in. by 8 in., is divided into boxes of various sizes in which details of the repair work, inspection, etc., are entered. These include: customer's name and address, number

documents are completed, its of advice note and order (if constant rotation, progress through the shop is received), and then 'personal' details of the instrument itself type, serial number, etc.; and details of the repair required, if

> At the same time, an entry is made in a book. This records merely the mail sheet number, a bare description of the instrument. and the date of receipt. This double-entry system ensures that a record of some kind is available in the unlikely event of the mail sheet getting lost or destroyed.

A ticket, colour-coded accordingly to the day of the week. is then tied to the instrument. The clerk then passes it to a colleague, seated beside him. who makes out a work ticket. This is a strong manilla tag divided by horizontal perforations into three identical parts - identified by letters A, B and C

Two of these parts are detached during repair. Details entered on the work ticket include date, mail sheet number, customer's name, code and serial number of the type of repair required.

Then, with the work ticket and coloured day ticket attached, the instrument is put on to a shelf indexed with labels of similar colours marked with the days of the week. As some instruments are moved daily into the store after checking by the shop foreman, the colour-code system can be used in

From this point onward, the instrument's progress through the repair shop and that of documents (other than the work ticket) are entirely independent. First, then, we will trace the instruments themselves through the repair organization

Before any instrument leaves the foreman's office, his clerk tears off the lowest portion of the work ticket. These documents, containing all the essential details of the job, give the foreman an accurate picture of shop loading.

#### One bench, one job

Inside the shop, work benches are specially designed to accommodate a maximum of 10 operators with plenty of elbow-room. On each bench all the 'services' needed for repair (vacuum apparatus, for example) are laid on. In addition, a nucleus store of components is maintained to enable the operator to begin servicing immediately.

Components used in the repair of the instrument are noted on the manilla ticket and the bench store is reimbursed. Normally not every bench is fully occupied. Each is allocated to the repair of one specific type of instrument and men are moved from bench to bench according to how work comes in.

Though chance might appear to be the governing factor so far as inflow of repair work is concerned. in fact it plays a relatively small



H. C. Law, who is responsible for Smith's repair procedure, joined the company at the age of 14 in 1916. Even then, Smiths made airspeed indicators, altimeters, barographs and accelerometers. From 1939-45 his repair department kept 750,000 instruments in service. Acquired his technical knowledge by apprenticeship and night school.



Customers' details are kept in a rotary file which houses 20,000 large record cards.

part. Long and intimate acquaintance with the company's instruments and study of repair statistics have taught H. C. Law, the department manager, that certain types of fault appear more frequently than others. He knows the percentage of each type of instrument which is likely to appear.

After the instrument has been repaired and passed inspection, the test report sheet, which acts as a delivery note, is passed to the office and the instrument, with its tie-on label, is routed for packing.

A filing clerk then connects the instrument instrument test report to the mail sheet, so that when making out the a repair is official ARB or AID release, any one of th special instructions or destination of dispatch can be entered.

#### **Red** for priority

When an emergency (AOG) item comes in, the records department are immediately alerted. It is their duty to set the priority system in motion. All over the workshop in strategic positions are small blackboards fitted with red lamps.

Brief details of the repair are written on the boards and the red lights turned on. As each stage of repair is completed, the entry on the board is erased. But the lights are not extinguished until a release note is made out and the instrument dispatched.

Now to return to the documentation progress, where we left the case-history mail sheet in the hands of the clerk at the check-in point. He completes as many details as are needed and passes it to the records department.

First person to receive the mail sheet is a clerk who sends the customer a receipt note for the instrument. A duplicate copy goes into the mail sheet.

Next the mail sheet passes to a second clerk who, by this time, has probably received an order from the customer. From this, she makes out Smith's own order. This may be internal — that is, for the instrument to be repaired on the premises; external, for cases when a repair is sub-contracted out to one of the organization's other companies.

A copy of the order then goes into the mail sheet, which is passed to the clerk in charge of the customer index. This is kept in a rotary card file which holds 18,000 to 20,000 large-size record cards.

Cards are filed alphabetically under the customer's name. And for each customer, cards are made out for all the varying codes of instruments returned. In the case of Vickers, it could be 100 or more, each relating to repairs to different types of instrument. Reference to the index yields immediately a list of all types of instruments repaired for any customer.

On the customer record card the clerk enters: date of receipt; customer's order number; internal or sub-contractor's order number; serial number of the instrument; and mail sheet (repair identification) number.

#### Into the archives

When she has entered these details, the clerk puts the mail sheet into a lateral filing system. The mail sheets remain in this cabinet until a copy of the release note is received and put into them.

They are then moved into box files housed in the records department. There they remain for several months, and are gradually moved, as they are crowded out by



Work progresses smoothly in the shop and is not geared to the speed of documentation in the office.

section upstairs.

One excellent result of using the mail sheet system is that all records are kept together and all are of uniform size. Further, all essential details are written on the outside of the envelope for immediate 2 reference. Supporting documents, if required, are to be found inside.

\$

This procedure immensely simplifies the filing and makes searching an easy job. All the box files are indexed on the outside with serial numbers of the mail sheets. So, if a customer wants details of a repair done, say, two years ago, he need only quote the serial number of the instrument.

Smith's new repair workshop, which has been operating smoothly since its opening in February last year, receives an average of 1,000 instruments per week.

The system, both of documentation and dealing with the instruments, has been an unqualified success. Summing up, these are the reasons for it:

#### **ACTUAL REPAIRS**

Routine work is always dealt with in rotation.

There is a foolproof system for priorities.

Work does not await completion of documents.

Statistics on recurrence of certain types of work have been compiled so that: minimum time is spent in finding faults; volume and type of work can be anticipated; requirements for space can be estimated accurately.

#### DOCUMENTATION

C

Each instrument has an unchanging identity number.

Costs are standardized.

Complete information is available at any stage of repair.

Filing is easy and orderly because all documents are housed in envelopes of standard sizes.

All important particulars are laid out in a way which allows them to be read without examining any other documents. END

new material, into an archives £3,000 - £4,000 - £5,000? DEVELOPMENT ... RESEARCH ..



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VEMBER, 1959

ACCOUNTANT:



(Top): He is at the crossroads of his career. Will he be accepted and trained as a useful citizen or—like so many today — drift into frustration and indolence?

#### Tomorrow's Craftsmen

#### Who is to foot the bill?

Three years from now Britain faces a grave shortage of skilled workers. We need a national plan for apprentices—now

by Dennis Brooks

ALL the 40 boys had begun work at the clockmaking factory within a few months of each other. They were fresh out of school and keen to learn. Some went to evening classes to prepare for the apprenticeships they were to start at 16.

A year later they were told: "We only want eight apprentices—the rest can stay on as learners."

At a small electrical manufacturers, two boys were taken on as apprentices. Later they appealed to the Youth Employment Officer that they were not being taught anything. When inquiries were made the manager of the firm

LL the 40 boys had begun said: "We are too busy—the boys work at the clockmaking must pick up what they can."

These are true and fairly representative examples of experiences of youth in industry today. There is a buyer's market in school leavers and many of the large firms are skimming off the cream and offering 'learnerships' to a few of the rest. Of the smaller firms—the bulk of British industry—most neither offer apprenticeships nor join group training schemes.

Factually, the position is this:

The average monthly unemployment figure for 18-year-olds and under is 31,000.

- ▶ The estimated number of employed is 1,900,000.
- Of these some 32 per cent are apprentices, 1 per cent go into the professions, 7 per cent into commercial and clerical work, and 60 per cent into unskilled work.
- In recent years 640,000 a year have reached school leaving age. In 1961, 1962 and 1963—the 'bulge' years—this figure will increase by 40 per cent, 52 per cent and 34 per cent respectively.
- Since the war 100,000 school leavers have been going into skilled or apprenticed work. To supply the craftsmen which Britain must have in future years, industry must take 35 per cent more apprentices between 1961 and 1965.

#### **Apathy**

But the Government, the Industrial Training Council, the employers' federations, and the unions have this matter in hand. In April the Government offered industry £75,000 to lay the 'bulge bogy' on the condition that industry contributed a similar amount. In June the Industrial Training Council asked the employ-



Youth employment officers are handicapped. Their lack of status inhibits their dealings with schools and employees.

ers' federations to say how much of the £75,000 they wanted. September 15, the last day for applications, response had been so poor the offer was extended indefinitely.

And the unions? In some cases -the printing and shipbuilding industries are examples - their reply is to limit the number of apprentices employed.

were highlighted in the report both teachers and management, which seems to have been lost in 'Training for Skill' of the Carr Teachers should broaden their the maze of committees, was that committee. Following the report outlook to include a substantial of Croydon and East Surrey many discussions, conferences and knowledge of working conditions Engineering Training Committee. parliamentary debates were held. and should familiarize themselves One London youth employment with local opportunities for young suggested to the National committee invited 300 employers to a conference, but only ten turned up. Another committee received dence and encourage regular training schemes should be asked to no reply from 100 invitations except one who wrote to say his business was to make money, not of what is needed. Youth supplemented perhaps, with some train apprentices.

Secretary to the Minister of for school leavers. Their lack of Government to revert to the 16th Labour, 200 directors attended, status and authority inhibits them century practice of making it com-They were asked to take more in their dealings with both schools pulsory for industry to take a apprentices. But at the next and industry. The schools are slow proportion of apprentices. This 'intribe season' in their area the to help, maintaining that their job system works well in Australia, and number of new apprentices regis- is education, not vocational a similar system—the three per tered fell by seven per cent.

the Industrial Training Council, need for guiding the youngsters, cold BUSINESS: "Whether or not there are few careers teachers in we will be successful in getting modern schools. industry to take extra boys in 1961 vet, this is 1959."

one that will suddenly arrive in two take five years? And is it consistent years' time, but one that already that industry should accept trained faces industry and will go on getting men from the services where the steadily worse till the climax is reached in the 'bulge' years. three years? Even in 1955 the King George's Jubilee Trust in its report, 'Citizens of Tomorrow,' deplores the fact that only one in ten youngsters go into employment where there is a specialist staff to receive, train and generally look after their interests.

#### Frustration

The Trust, like other organizations who have investigated the emotional disturbance evident in visits from school leavers.

Employment Officers - handi- contribution from industry itself. At a third meeting, addressed by capped in finance and numbersguidance. Even though they have cent quota of disabled workers-Y. Cobb, deputy secretary of acknowledged the problem and the prevails with us now.

A second need is for a more will depend on the general imaginative approach from economic situation and the state of industry. Many of the four- and their order book at the time. For five-year apprenticeships could be the moment employers don't want reduced by a year or more, most to know. They tell us: 'Go away, 'learnerships' could be made into we are not thinking of the bulge 12-month intensive courses. Why can Western Germany train their The problem, however, is not tool makers in 3½ years while we 'apprenticeships' last just over

#### The unions

But perhaps the greatest scope lies with trade unions. There is something basically wrong with a system that draws boys away from apprenticeships into highly paid unskilled work, and encourages them to work at piece rates and payment-by-results.

These are a few suggestions put forward to overcome the problem of Britain's unwanted youth. There school leavers, attributes their have been many others, but they frustrations to a lack of preparation have been either impractical or for work and management's failure long-term answers demanding to appreciate the special interests much preparation. One suggestion and needs of young people. Heavy which, however, appears to have The 'bulge' and its problems responsibility, they say, falls on been particularly commendable but

> About a year ago this committee people. Management should set Apprenticeship Training Council out to win the youngsters' confi- that firms who have established increase their intake of apprentices This, however, is only a fraction and given some form of tax relief,

If all else fails, then the one Mr. R. Wood, Parliamentary are restricted in what they can do remaining course open is for the

# Whiteha



EITHER Swiss nor American businessmen are in the habit of putting their money into unpromising projects. Yet both are backing, in Italy, an idea which the British Government and British industry had the chance to develop two years ago. Facilities, buildings, services, were lacking. British industry played with the idea, then forgot about it.

That was when the British Industries Fair gave its death rattle in 1957. Then the cry went up that the day of the generalized exhibition was over; that only the specialized exhibition stood any chance of success. That, it seemed, was final.

The concept. Well, some hardheaded businessmen look like proving that there is a demand for the generalized exhibition-provided it is given a new slant. The slant they have chosen is to make it permanent-and international. And that is why Permindex, a vast permanent industrial exhibitionhence the name-opens next March in Rome.

Or not quite in Rome, but in a dazzling new Rome which is being completed a mile or so to the north. This city is EUR - Esposizione Universale di Roma, Rome's universal exhibition.

round. Any firm or group of firms from any country can take space. Thus a businessman can combine a trip to Rome, made for a conference, sales, or pleasure, with a tour of the exhibition. He can quickly see what other countries are doing, not just in his own industry, but in allied industries.

Add to this the modern hotel that serves the exhibition; the fast, broad, highway linking it with Rome proper; and the convenient parking. Especially add the fact that EUR is a place of space and spectacular beauty. It was built to house Italy's Whitehall, forced to move from its ancient and cramped premises in central Rome. The buildings. Strangely enough, the exhibition buildings are probably the oldest in EUR. They were built in 1939 by Mussolini for a grandiose national exhibition. abandoned when Italy entered the war. Then incomplete, they were occupied by squatters when war ended. Now they are resplendent with mosaic and black and white marble, and look a lot less than 20 years old. There are four exhibition palaces, interspersed with gardens, fountains, pools, and statues.

The buildings are Italian, the

The doors are open all year can, and the president of the exhibition is a former Hungarian premier. So the international flavour is there from the start.

> A large amount of space has, naturally enough, been allotted to America and Switzerland, and to Italy, as the host nation. But in this huge exhibition there is plenty of space for everyone. Firms, trade associations, or governments can rept anything from a showcase to a room, exhibiting actual products or information about them.

Of special interest are the cinema, the 'contact' service, and the translation facilities. Suppose a British manufacturer of textile machinery wants to make only a token display. How can he put over a complicated sales story? Permindex will, at a reasonable charge, arrange for a film to be made, putting over the necessary information in various languages. Then when, say, a Brazilian businessman inquires about textile machinery, he will be invited in his own language to see, among other things, the British firm's film. Or. when the inquirer desires, he is put in direct touch with the exhibitor. The lesson. Permindex is only the latest example of European imagination and enterprise which threatens to push Britain in general chief promoters Swiss and Ameri- and London in particular into a



Services offered are as

Two years after British Industries Fair died-Italy's Enrico Mantello shows how a permanent exhibition can pay off. Deputy Editor William Guthrie reports from Rome on the chance Britain missed

Enrico Mantello, the Permindex dynamo. He faced a British Press barrage for more than an hour without faltering.

exhibitions are concerned.

What is Britain likely to have to compare with Permindex or the vast new exhibition halls in Paris and Brussels? The answer is: nothing, not even a plan. The Federation of British Industries. concerned about this situation, recently took stock of exhibition facilities\* of all kinds in Britain, asked for the views of the organizations which use them, and came to the decision that Government help was essential if British industry, let alone world industry, was to have an adequate shop window in this country.

Olympia, in Kensington, built in 1886, is completely out of date. Its appearance and amenities are Victorian. It is unable to cater properly for the needs of many

backwater, as far as international exhibitions, with their often massive exhibits, or for the needs of their visitors-for instance, even a place to put their cars.

Earls Court, built in the 1930s. should be much better. In fact, it is not, because for some unaccountable reason it modelled on Olympia, then already some 45 years old. It has no daylight, poor parking, and because of its design needs a maze of exits and staircases to comply with fire regulations. All exits have to be guarded, at great expense.

The F.B.I. asked representative bodies what sort of facilities they would like and be prepared to pay for. Most wanted a 500,000 sq. ft. site in Central London, but the cost of this would be prohibitive. Some were prepared to support a proper exhibition hall on the Crystal Palace site. Others considered this too far from Central London.

The Federation themselves have come up with an idea which although a compromise, is bold. It is to make drastic improvements and extensions, costing £3 million. to the Olympia buildings. A multistorey building would be erected over the railway tracks, giving up-to-date facilities for light industries, and adequate catering, conference rooms, and car parks. The old buildings would be connected to the new by escalators, bridges, and a high-level road road system. The difficulty would be to find the money, unless the Government agreed.

If only the Government or some commercial group had realized, before Permindex, that a permanent general international exhibition might pay its way-and leave something over for investors. Then Britain might have had a broad shop window for herself.

<sup>\*</sup>Exhibition Facilities in the U.K., Federation of British Industries. 5s.

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#### We End the **Errors Problem**

by John Smith—Overseas Accounts Manager, Fort Dunlop

With one million forms a year to handle, accuracy took priority over economy in this export department. But the new duplicator saves them money as well

F the 150 companies and plants throughout the world that make up the Dunlop Rubber Company, probably the best-known is the 250-acre 'tyre town' of Fort Dunlop, on the outskirts of Birmingham. Here are made tyres for all kinds of vehicles-from scooters to earthmovers, bicycles to j t aircraft.

With this great range of products a capacity to deal efficiently with heavy peak loads of work is vital and this applies equally to the invoicing a simple procedure compared with

section of the Overseas Department at Fort Dunlop where well over 50,000 export invoices are handled each year. Many cover several pages and up to 35 copies are needed of each one.

In this section-handling well over a million forms a year-speed, accuracy and quality take precedence over economy.

Nevertheless it has been possible to bring about a worth while saving in staff and ensure that the formidable volume of work is handled expeditiously and with a minimum of mistakes.

It was in 1953 that we decided that our methods for producing export invoices needed to be overhauled. And after considering various methods we decided to put in Banda duplicating machines.

With these our typists copied the invoice details on to only one piece of paper, without interleaving carbons. Not only did this save time, but any mistake called only for one simple correction-instead of the previous risky procedure of erasing it throughout a set of forms.

Again, checking a single sheet was

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checking of sets of forms where it was necessary to ensure that, if a mistake had been made, it had been accurately corrected on every copy.

With up to 35 copies of each invoice required, the idea of typing it on one sheet of paper was not only the safest procedure but by far the quickest.

The invoice masters are typed on I.B.M. machines, which are particularly suitable for this work. Line poster grade of transfer sheets are used to obtain the hectographic impression on the reverse of each master sheet and from this duplicators provide the required number of copies at high speed. Incidentally, each sheet of carbon paper is used several times.

In the first instance the details typed on the invoice masters consist of quantity, description of goods, weights, measurements, etc. From these a set of shipping instruction forms and a file copy are reproduced. The file copies are then valued and passed to the shipping department with shipping forms.



50,000 invoicesmany covering several pages-are handled here.

designed.

On receipt of shipping instructions, the master is extracted and prices, extensions, etc. are typed on. The complete export invoice can then be copies has been reproduced, the immediately reproduced with as master is filed away in case extra many copies as required.

ments are required the signatures are considerable.

Pending receipt of shipping instruc- signed once on the Banda masters tions, the masters are stored in and reproduced on all copies. These individual filing pockets which we signatures are accepted as originals in many of the countries and the saving of time on this alone is appreciable.

When the required number of copies are needed later. Here again For markets where signed docu- the saving in copy typist's time is



#### Executive Car Report (1)

Re-equipping your sales force? Then the Vauxhall Victor may be the ideal car for you. At £716 inc. (£801 de luxe model) the Victor is smart without being flashy, fast without eating petrol.

In a 300-mile road test I found this car one of the easiest and safest to drive. The engine is in the 1½ litre class and carefully handled can give up to 35 m.p.g.

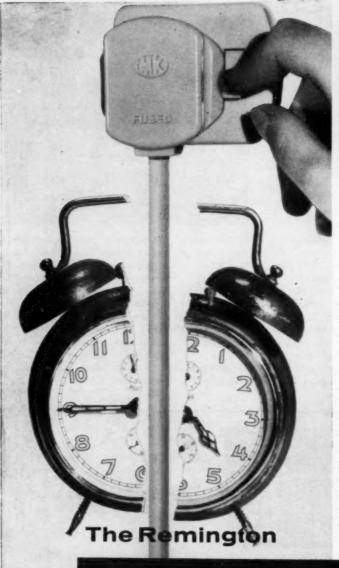
It has a low centre of gravity, keeping it nicely

stable at all speeds and accounting for its remarkably good road manners. Minor fault-the low roof, which gives the car a rakish look, tends to restrict rear vision.

Four forward speeds would also be an improvement on the present three. With our intolerable road conditions it is often necessary to inch forward in bottom gear. Crawling up out of Rochester behind a large crane, for example, I could only save stalling by letting the clutch slip. But this was an exceptional circumstance.

In all other respects it is difficult not to be extremely flattering about the Victor. Top speed was around 75 m.p.h. and cruising at 60-65 m.p.h. was smooth and effortless. The interior is in good style and there is plenty of room for passengers.

Verdict: A good buy-for the company, and its younger executives .- D.B.



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## Who can help me sell abroad?

Given here are some of the 'second opinions' provided privately last month by BUSINESS staff experts

We now produce sufficient electrical goods to consider exporting. Can you tell us what information services there are which will give us useful leads? And are there any groups of manufacturers maintaining in formation agents abroad on a share basis?

• Sources of reliable information on foreign markets are quite numerous. The Export Services Branch of the Board of Trade publish: Calls for tenders; commodity reports; Economic reports; General market reports.

These are available at a fee of only 2 gns. a year and are highly regarded by exporters. Their one disadvantage—they sometimes contain information too late to be acted upon.

Occasional reports and advisory services are also offered by such organisations as the Federation of Britsh Industries, the National Union of Manufacturers, the Institute of Export, and various trade associations.

In addition, the Board of Trade can supply special information—free—about particular markets and countries. Before sending a representative abroad it is advisable to contact the local British Embassy, or the Trade Commissioner here of the countries you intend visiting.

Another very useful source is your bank, or the London branch of one of the banks of the country you intend exporting to.

Regarding the second part of your query: a dozen manufacturers in the engineering industry have formed an 'export association' which supplies them with foreign marketing information, but this idea has not been taken up elsewhere. Why not suggest it to your own trade association?

Does anyone produce an electric pencil sharpener? The time wasted on this chore in our drawing office is quite fantastic.

● To the best of our knowledge no machine of this type is made in Britain. However, you should be able to get dollars to import one from the United States, and we will send you the address of a manufacturer. As American voltages are lower than ours, mention your voltage when you write.

Can any of your readers offer practical suggestions for converting a fairly large suspended filing system into a lateral layout using the existing cradles and filing folders? It is necessary for me to find increased office accommodation and I could find the space if I could dispense with a number of drawer-type filing cabinets.

• A framework of slotted angle would probably be the answer. This would enable you to use the chassis from your existing cabinets and dispense with the space taken up by pulling out the drawers.

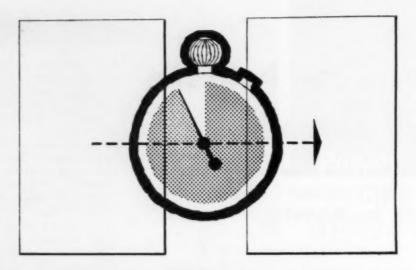
We believe there is a device on the market which heats sealing wax electrically and deposits the appropriate amount at the touch of a button.

● There is such a machine. Two models are available — one which can be fixed to the wall and the other which can be used 'free-hand

#### Are Your Costs and Prices Realistic?

This table, based on retail price indices, gives a rough set of conversion factors for bringing values up to date. For example, if you bought a machine for £100 in 1931, for which year the conversion fector is 2.9, you would expect a similar machine now to cost, roughly, £290. The table will be amended to reflect appreciable changes in the index.

Con-
Year Factor
1004 0.0
1936 = 2.9
1937 = 2.8
1938 = 2.7
1939 = 2.6
1946 = 1.8
1947 == 1.7
1948 == 1.6
1949 == 1.5
1950 = 1.5
1951 = 1.3
1952 - 1.2
1953 = 1.2
1954 = 1.2
1955 = 1.1
1956 = 1.1
1957 = 1.0
1958 = 1.0
1959 = 1.0



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#### take a film Miss Smith

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AS A TRAINING MEDIUM, film is unsurpassed—it is a proved fact that the mind will absorb far more quickly and retain longer, any information that is shown visually.

FOR ACCIDENT PREVEN-TION AND WELFARE FILMS, points of danger and interest can be clearly emphasized to make a far greater impression on the audience.

Undoubtedly films can make your business more efficient and at the same time cut costs. Why not write to us for more information, for who better to give advice on these problems than the distributors of the world's most famous and widely used professional 16 mm. equipment. In fact, wherever films are shown it is almost certain that Paillard-Bolex Swiss precision - made cameras have helped in their success. Ask any film unit.

The Paillard-Bolex H16 camera at work in the Hermes Typewriter factory.



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Swiss precision-made cameras is famous throughout the world for performance, quality and reliability. They have every feature required by the industrialist and, because of a remarkable specification, are usually chosen for any type of important research work or industrial filming. The H16M at £99.19.6 is one of the most advanced 16 mm. cameras within its price range.



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#### Why Industrial Films Are

#### **Booming**

by George T. Rae

MALLER firms have tended this country says that demand far films of good quality can be less than £500.

Now the situation is fast story. changing. One of the best-known suppliers of ciné cameras in purposes:

to neglect the industrial film exceeds supply. A large British until the last few years, manufacturer says that industrial largely out of ignorance. Most users are becoming an increasingly were unaware that the complete important part of what was once equipment for making and showing almost entirely an amateur and only projection equipment is educational market. Projector manufacturers report the same

educational, including training and instruction:

sales promotion; and method improvement, including techniques like work study.

For these purposes, home-made films are generally best-firms can show exactly what they want to, putting more emphasis on this or that, or giving a particular slant. But the cost of film showing can be drastically cut by not making films at all and using films from one of the many libraries. Then needed.

Many of the firms who are today among the strongest advocates of Industry uses films for three main 'do - it - yourself' film - making started their film adventures with a

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BUSINESS



PORTABILITY is the keynote of modern 16mm, equipment. All projection apparatus goes in two or three suitcases.



SCREENS fold into containers a few feet long, a few inches in diameter. Thus sales' prospects' can see a film without having to leave their offices.

few reels borrowed from a library, makers to make their own comand a small projector in the works mentaries because for industrial social club, throwing a modest picture on a white wall. In fact, several ciné equipment manufacturers have found that industrial users who came to them first only commentary is designed to run for projection equipment return over 30 minutes of tape. For showmonths or years later for the para- ing, all that is necessary is to phernalia of film-making.

films is that over recent years they the commentary, the degree of have become cheaper and easier to make and show. Formerly, wide gauge - 35mm. film - was essential for a clear picture. Projectors ing, requiring two separate pieces able, followed by short case-

itself is better. The 'graining' is operation and a rather more profiner. This means that 16mm. film fessional touch can be achieved by can replace 35mm, at much less than half the cost. And the advent of tape recording, together with magnetic coating-striping is the technical term-whereby one or both edges of the film can carry sound just like recording tapevastly increases the versatility of film. Projection equipment for 16mm. is also much cheaper than for 35mm.; so are cameras.

One is tempted to hope that soon, the 8mm. film used for cheap home movies will replace 16mm., if only the filmstock manufacturers could achieve another improvement in quality. But the experts dismiss this as impractical or impossible. if only because 8mm. cannot spare even the very narrow width for good magnetic coating.

It is easy to see why tape recording and magnetic striping have made firms take another look at films. Before, the only way of providing a film with commentary was an optical sound track-a 'picture' of sound vibrations reproduced as a line of varying width alongside the corresponding shots. Putting on this optical track is a job for a laboratory. The visual part of the film is shot and then handed over to the experts.

#### Synchronizing

Tape recorders enable filmpurposes exact synchronization between picture and sound is seldom essential. If the film is to run for, say, 30 minutes, then the switch on projector and tape-One of the biggest reasons for the recorder simultaneously. With increased interest of industry in reasonable care taken in scripting for most purposes.

Of course this method of show-

were clumsy, heavy, and expensive. of equipment, might be too clumsy Now the film material (stock) for various circumstances. Simpler having the tape recording 'striped' on to the film itself.

> A further refinement is to have an optical track as well as magnetic stripe. This is particularly useful in sales films that have to be shown in more than one country. The optical track, which cannot be erased or altered, is a permanent record of the original commentary. The magnetic stripe contains the commentary in one language; after showing, it is erased and replaced by one in the next language-a simple, relatively cheap process.

#### **Collecting commentaries**

Another use of the dual sound track system is for updating commentaries on, for instance, processes that have changed since the film was shot. By using the facilities which all the better projectors possess, the contents of the optical track are transferred to the magnetic stripe simply by running the film through the projector and operating a switch. When the outdated part of the film appears, the optical commentary is suppressed, while the operator, speaking into a microphone, corrects the commentary. As soon as the correction is complete the projector reverts back to the optical commentary.

Most of the better projectors also have facilities for compre-Thus a hensive 'mixing.' 'straight' commentary on the optical track can be transferred to the magnetic stripe together with music from a gramophone and sound effects from a microphone.

Many firms, using film for the first time, will probably first show films borrowed from one of the many libraries. For this they will need only a projector and a screen. Then, as they appreciate the value synchronization should be adequate of the medium, they will buy a camera. So here is a quick guide to the equipment and films avail-



# YOU KNOW the value of FILM?

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Whether you make your own films or use those which are available from the G.B. Film Library (the largest in Europe), the unequalled range of famous Bell and Howell cine equipment makes it much easier and much more effective to show the way by film.

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FIRM

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Gerrards, the fruit chain, made a dual purpose film-for prestige and instructional purposes. All work, except putting on the magnetic sound, was by their own employees. Here, fruit cleaning operations are shot.



Next comes editing a vital job. Perhaps only a small fraction of film used is incorporated in the completed work.



Lastly-the commentary background music from records and the 'story' spoken into the mike. Then the film goes to the laboratory for sound and vision to be married.

histories of enthusiastic industrial film users.

Projectors. Two of the best-known ranges of projectors are those by Bell and Howell (Rank Precision Industries) and BTH. For anyone not acquainted with 16mm, equipment, it is difficult to appreciate their portability and compactness.

Complete projection equipment can be carried easily by one man in two or three cases. This includes projector, stand, amplifier, transformer, microphone and one loudspeaker or more. Cost ranges upwards from about £220 for a projector which handles optical sound tracks only. Additional used by amateurs for home movies

magnetic stripe facilities cost from £20 to £50 more. This equipment gives a picture bright enough and sound loud enough for a hall seating up to about 100 people.

Equipment in the £300 to £400 class gives brighter light, and therefore a bigger and brighter picture. And at the end of the scale, at £700 to £900 are projectors with brilliant arc lights or Xenon tubes and a performance equal to equipment in good commercial cinemas.

Screen. The screen's job is to make the most of the light coming from the projector, giving as much contrast between the black and white. A matt cloth screen is probably ideal where the projector lamp is bright, or the picture and hall small.

Where maximum brightness is required, use must be made of a high-gain screen, that is, one that reflects the maximum amount of There are several kinds. Beaded screens consist of glass beads. Aluminised screens are coated with a sort of aluminium paint. Pearled screens have a matt coating of transparent plastic.

All possess, to a greater or lesser degree, the disadvantage that their reflectivity is rather directional that is, people sitting along or near the line of the projection beam will see a bright picture while those farthest away from the beam may see a less brilliant one. The use of such screens is therefore generally advised principally in long narrow halls. Screen sizes vary from portable ones of about 4ft. to fixed ones of 12ft, and much larger.

Portable screens are particularly useful for sales and others who have to get a message over in the shortest time for instance, to show the vital points of industrial plant to a small group of executives. A portable screen takes up no more space in his car than a rolled up wall-map. One pull extends the screen, another jerks the stand into place. Costs range from about £5.

Cameras. The 16mm. cameras

are perfectly adequate for most industrial films. But the refinements possessed by the slightly more expensive models make the best results easier to obtain.

Two of the best-known ranges of cameras are the *Bell and Howell* range made by Rank Precision Industries and the Paillard *Bolex*, distributed in this country by Cinex. Prices range between £80 and £200.

#### Films for hire

Undoubtedly the greatest need of private films is for training and general instructional films. Unfortunately, by far the most numerous are entertainment and strictly educational films. Yet by patient searching, most companies can generally find something which meets their needs, or nearly so.

Many films can be hired free; others cost from 10s. to £1. Here are some of the main sources of films for hire:—

Dunlop; G.B. Film Library; Unilever; Shell; Esso; Ferodo; Mobil Oil; Royal Society for the Prevention of Accidents; Petroleum Films Bureau; British Transport Commission; Sound - Services Ltd.; Electrical Development Association; I.C.I.; Department of Scientific and Industrial Research, including many of its affiliated research organizations—especially the Building Research Station; The Central Film Library, operated by the Central Office of Information; Ford Motor; Rootes Group.

Hundreds of titles are available from these and other sources. But users learn quickly not to order by title alone. Peter Spooner, in his comprehensive survey, Business Films, to be published shortly by Business Publications, tells the story of a woodworking company who ordered a film called 'The Sawmill' only to find that it was old-time slapstick comedy. Previews are well worth while.

Various bodies, notable among them the Scientific Film Association, help firms to track down a wanted film or subject. The S.F.A. periodically publishes the results of specific investigations, either as catalogues or as supplements to its bi-monthly journal. The length of these lists, which include films



FRVICE

Work study is one of the widest uses of films. The camera often shows what the eye does not see. And films taken on the 'time lapse' principle—shot at intervals—often show more.

from all over the world, is convincing evidence of the value of patient searching.

The **Dunlop** film unit makes films for most purposes, including prestige, training, and educational. When a complete tyre factory was to be exported to Russia a problem arose which only they could solve.

#### How films are used

The problem was to prove that all parts were in working order when they left this country. So the film unit produced a film, showing the plant actually producing tyres, which was sent over with the plant. Of course the film had a secondary but almost as important function—not only did it show that the plant did work, but it showed how it worked.

This is only one of the 60-odd films made by the Dunlop unit. They plan, shoot and edit; processing and sound recording are put out to specialists.

They also make films which work for their living. High speed and time-lapse photography are used to discover things which the eye cannot see. These techniques are used for testing sports goods, textiles, tyres travelling at high speeds, and so on.

Improves internal relations. A 16-minute film, made for just over £200, is helping IBM United Kingdom with their labour relations. The company have a staff of more than 2,000 scattered between the London headquarters, their Greenock factory, and various branch offices. IBM felt that their group newspaper was not enough to give every employee a feeling of belonging.'

So 'Introducing IBM' was shot with a 16mm. camera by two members of the firm's information department. Locations ranged from Greenock to London and installations in the south of England. The film shows IBM products being made, sold and used. Of 2,000ft. of film which was exposed, 800ft. was selected and edited.

Although the primary purpose of the film was to assist internal relations, the company hope to improve recruiting by showing it at technical colleges and universities.

continued page 114

BUSINESS

#### BUSINESS

### NEW QUIPMENT

ERVICE

e these business reply cards obtain further information any of the items appearing the New Equipment section f this lesue. he section covers products for e in office and workshop, d also in canteen and welfare

#### **NEW EQUIPMENT · FREE SERVICE**

To obtain additional information on the items reviewed editorially in the New Equipment section of this issue, write their reference numbers

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Kodak, the largest photographic organisation in the world, make a range of specialised equipment and materials for 16mm movies, including —

The 'Cine-Kodak' K.100 Camera. A reasonably priced 16mm cine-camera with many special features recommended by industrial and commercial film units. Lenses can be chosen to suit the particular requirements of the owner. The K.100 Turret Camera, giving choice of normal, wide-angle and teiephoto lenses, is illustrated here.

16mm 'Kodachrome' Film. The finest colour film in the world, and the most popular. No grain — the image is made up of pure dyes. In 50 ft., 100 ft. and 200 ft. lengths. Suitable for exposures to daylight or artificial light.

16mm 'Ektachrome' Commercial Film.

A reversal colour film for use as a "master" where projection copies of the highest quality are required.

16mm Kodak 'Tri-X' Movie Film and 'Plus-X' Movie Film, the two black-and-white films that cover every requirement of speed and quality in 16mm movie making. These films can be supplied for processing either by the user or by a trade laboratory.

Advice on lighting equipment, professional editing services, copying services, trade processing, etc., will be given with pleasure by our specialist staff. Please write to Kodak Limited, Dept. 251, Industrial Sales Division, Kodak House, Kingsway, London, W.C.2.

Articles in Business over the past few years have dealt with the role of the 16mm cine-film in modern commerce. It is a versatile tool—one you can use in a dozen different ways from training staff to stimulating sales.

When you have read this special issue of *Business*, and have decided to investigate the possibilities of using cine-films as a production or selling tool in your own business, do what hundreds of other successful users have done—talk to Kodak about it.

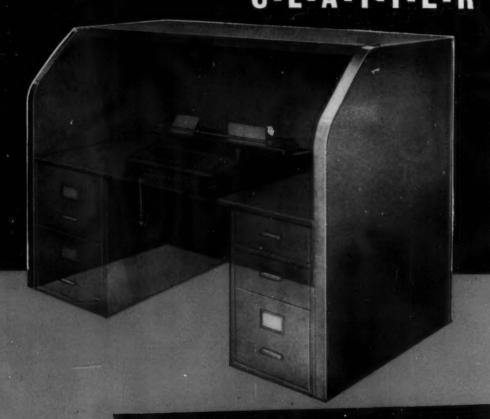
Kodak will be pleased to offer advice on the techniques of cinematography. This advice costs nothing, entails no obligation on your part, and will undoubtedly help to set you on the right road. A technical representative will call and discuss your own particular requirements so that you have all the necessary facts at your finger-tips before you start. In this way, you ensure the proper and successful use of one of the most effective and versatile business tools available to you.

So make the most of movie-making. Call in Kodak at the start.

# Kodak

Cameras and films for 16mm cinematography

# Muffle that accounting machine C-L-A-T-T-E-R



with an Enclosure by BURGESS

Burgess Acoustic Enclosures are supplied in the form of four separate panels which are easily assembled by unskilled

The units are of all-metal construction, with an inner lining of specially perforated mild steel sheet and an outer facing of plain, mild steel sheet, the intervening space being packed with non-inflammable, non-hygroscopic, highly sound-absorbent material. This construction affords a very high degree of sound absorption and insulation.

The enclosures are easily movable, attractively finished in a silver-grey hammer paint, supported on four metal domed for

BURGESS PRODUCTS COMPANY LIMITED, ACOUSTICAL DIVISION, MINCKLEY, LEICESTERSHIRE



# A maximis ad minima

'T-i-m-b-e-r!' is the call that rings through the forest as the giants come tumbling: but wherever timber comes into the picture, from Forest to Furniture Store, there is a common call for economy and efficiency in day to day paperwork.

Mammoth concern or High Street Store—whatever the industry or trade—Lamson Paragon Ltd., provide business systems to control routine documentation effectively.

Further information regarding a Paragon Business Form System, designed to 'cut out the dead wood' can be obtained from:



## LAMSON PARAGON LIMITED

PARAGON WORKS, LONDON, E. 16.
Telephone: ALBert Dock 3232.

MEMBER OF THE LAMSON INDUSTRIES GROUP

# DUNLOP

Of the sixty IBM 'Standard' typewriters installed by Dunlop at Birmingham and Coventry, twelve are used for typing masters for export invoices at Fort Dunlop. Since their introduction into this department, output of the Typing Section has increased by some 30%, and the controlled electrical impression has done much to avoid illegible copies which can so easily cause delay in delivery and payment. The typists themselves are very impressed with the ease of operation and there isn't one who would willingly return to using manuals. The use of IBM Electric Typewriters is only one of many cost-saving methods recommended in 'The Cost of Typing', Dunlop have a copy. Have you?

# 9.E.C.

As part of a cost-saving programme, the G.E.C. Switchgear Works at Witton, Birmingham installed four IBM Hektowriters to produce hectographic masters for spirit duplicating. Used with continuous stationery and pin-wheel platens, they doubled the output from 200 to 400 masters per operator a day and in six months had paid for themselves. Furthermore, by installing IBM Hektowriters and spirit duplicating, all the work can be handled by 6 operators instead of 19... an annual cash saving which G.E.C. have estimated as \$4,900; and one answer to the problem of finding space for an expanding business.

G.E.C. have a copy of "The Cost of Typing'. Have you?

# GKN

The Export Invoice Department of the GKN Screw Division has found that by using IBM Hektowriters in a replanned work flow, four typists are now doing more work than eight did before. The new system depended on the introduction of spirit duplicating, but only the electrically controlled clarity of the IBM Hektowriter could produce masters that would withstand the exceptional handling and give the number of copies required. Using IBM Hektowriters, the girls are far less tired, and overtime has been virtually eliminated. GKN have a copy of 'The Cost of Typing'. Have you?



'The Cost of Typing', the survey prepared by an independent firm of Management Consultants, can help to improve the efficiency of your typing department. May we send you a copy?

IBM UNITED KINGDOM LIMITED, 101 WIGMORE STREET, LONDON W.1. TELEPHONE: WELBECK 6600

ELECTRIC TYPEWRITERS . DATA PROCESSING . INTERNATIONAL TIME RECORDERS

cut the cost of typing with

**IBM** 

electric typewriters





Shining example Lycoteuthis diadema is an outstanding illustration of Nature's skill as a lighting engineer. Operating at a depth of nearly 10,000 ft, under a pressure of 6 tons per square inch, and at near freezing temperatures, the lighting system of this deep sea squib never lets him down. You can't look to Nature to solve your lighting problems. Fortunately we have put in a lot of time on the subject and whatever your need may be, you can be sure that the Siemens Ediswan range of lamps and fittings will provide you with the natural answer.

Ask for the following lighting catalogues:

Commercial, Industrial, General Service Lamps, Floodlighting.



SIEMENS EDISON SWAN LIMITED An A.E.I. Company
Lamps and Lighting Division, 38 & 39 Upper Thames Street, London, E.C.4 Telephone: CENtral 2332



L.V. TIME

May we send you
a copy of our
booklet, showing
how you and
your staff can
benefit by our
Luncheon



... as thousands of other conscientious employers have done by giving 2,500,000 of our vouchers a month, in the major cities and towns throughout the United Kingdom.



Voucher service

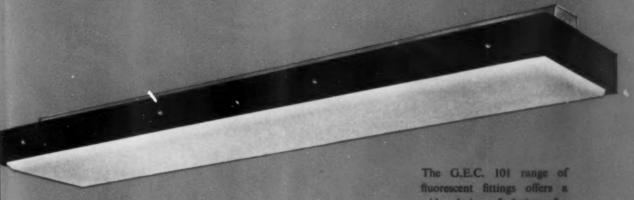
#### **Luncheon Youchers Limited**

Saxone House, 74a Regent Street, London, W.1. REGent 5711

for every lighting requirement in executive offices, shops, stores and factories



fluorescent lighting fittings



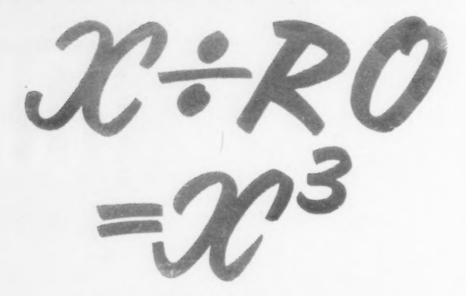
The G.E.C. 101 range of fluorescent fittings offers a wide choice of designs for every lighting requirement. Employing the G.E.C. basic channel with its advantages of versatility and economy in installation and maintenance, they are used with 1½ to 8 ft. single or twin Osram guaranteed tubes.



S.E.C.

THE GENERAL ELECTRIC CO. LTD., LONDON, W.C.s.

Formula for solving office space problems . . .



Impossible? Not this way:

Divide your present offices by Rubery Owen Steel Partitioning and you get offices multiplied by themselves—as many as you need.

It's as simple as that—as you can see from the special booklet\* that tells you everything about

# RUBERY OWEN

# STEEL OFFICE PARTITIONING



Like to know more about Rubery Owen Steel Partitioning . . . . about its speedy erection, simple re-arrangement, many forms? Like to? Then please write for the special booklet that tells all.

Write to any of the addresses below:

Did you know that LEABANK is a member of the Owen Group and that their office

furniture is made in the Rubery Owen factories? So when planning the office—

plan OWEN-wise.

#### RUBERY OWEN & CO. LTD. METAL EQUIPMENT DIVISION

WHITEGATE FACTORY, WREXHAM, N. WALES Telephone: WREXHAM 3566-8

#### LEABANK OFFICE EQUIPMENT LTD.,

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112

BUSINESS



#### G. F. E. BARTLETT & SON LTD

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SB.107
BIRMINGHAM: 12 Whitmore Read. Tel.: Victoria 1615. MANCHESTER: 530 Stretford Read. Tel.: Trafford Park 0268

#### Industrial Films

Starts on page 99.

Helps push sales. Senco Products, Cincinnati, Ohio, makers of pneumatic stapling machines, made a colour film to show their applications in furniture and bedding.

Their agents, Rosenheim & Co., of Glasgow, bought a Bell and Howell projector so that customers could see the film on the spot. The equipment paid for itself in a few weeks. The next move is to purchase several more projectors so that showings can be given simultaneously in various parts of the country. The film puts over, more quickly and more clearly than can live demonstrations, the economies in using the stapling machines.

Explained new principle. The Baldwin Instrument Company's problem, solved by film, was to explain to industry the principle behind their isotope thickness gauges. Baldwin had to find the best way to interest prospects in an

instrument of which they had almost certainly never heard.

The gauges were already in use in the paper and in other industries. Firms were approached and agreed to allow Baldwins filming facilities. A 16mm, professional production unit was engaged and given a free hand in its treatment of the subject.

#### How it works

'Nucleonic Measurement' is not a sales film as such. It merely shows how a new instrument works and explains its principles, thus telling how it can benefit industries engaged in the manufacture of sheet materials in continuous production. For this reason Baldwins envisage wide distribution at home and abroad.

Solved a fire problem. In May 1957 the Colt Group, makers of ventilators, joined with Cape Building Products, in setting fire to a building. This was a test designed to prove that a combination of fire-resisting insulation and proper ventilation could prevent major damage to the structure. And the test worked.

Realizing that this was a unique opportunity Colt, who have been film users since 1931, filmed the entire test. More than a score of copies were made and distributed throughout the world. The new ideas it put over have proved the film, 'Fire Control in Industry,' a worth-while investment.

Colt's first film, made in 1931 for one of their subsidiaries, demonstrated roofing methods. It was so successful that it has been remade three times.

About eight years ago Colt started to make films for industrial purposes. At present they have various sales training films dealing with industrial problems. They also carry out photographic air surveys of their clients' factory roofs—a spectacular effort for a non-professional cine-photographer.

ENI

#### FOUR BACK ROOMS 18 minutes

Four examples of the work of BTC scientists

#### FULLY FITTED FREIGHT 21 minutes

How an express freight train links manufacturers with their customers at the other end of Britain

#### GROUNDWORK FOR PROGRESS 30 minutes

The British Railways Modernisation Plan and the civil engineering work involved

#### UNDER THE RIVER 23 minutes

An account of the construction of the Severn Tunne!

#### WORK STUDY AND TOM HOWARD 20 minutes

Training Work Study practitioners in the BTC

To borrow these free films or to obtain the services of a projectionist and equipment to present a complete programme of transport films to appropriate audiences, write, phone or call,

#### The Films Officer, British Transport Films.

25 Savile Row, London, W1 Telephone REGent 0613

Jeannie Carson Donald Sinden

ROCKETS GALORE

IF YOU LIKED WHISKY GALORE! YOU'LL LOVE THIS



Peter Eva Tony FINCH BARTOK BRITTOI

WITH EXCITEMENT AND

- HEWG CHRONICLE



HE'S IN THE ARMY NOW -TO THE ARMY'S REGRET!

NORMAN WISDOM



HILARIOUS AT HAPPENINGS AT HAVEN HOSPITAL HAVEN

A NOVEMBER (1959) RELEASE

SHIRLEY EATON - KENNETH CONNOR CHARLES HAWTREY - HATTIE JACQUES TERENCE LONGDEN - BILL OWEN KENNETH WILLIAMS

Funnier even than 'Carry on Sergeant'.

WITH A HOST OF COMEDY STARS

WILFRID HYDE WHITE

KENNETH MORE . TAINA ELG





AN APRIL RELEASE

TERRY-THOMAS-PETER SELLERS LUCIANA PAOLUZZI

of the F.O



A JULY RELEASE

**BERNARD BRESSLAW** TOO MAN'S

**TERRY-THOMAS** 

GEORGE COLE BRENDA de BANZIE



MARCH RELEASE

A DRAMATIC STORY OF CONFLICTING EMOTIONS

The MAN



RICHARD ATTENBOROUGH LEE DONALD HOUSTON ALISON

A NOVEMBER 1959 RELEASE

G.B. Film Library Announce their NEW RELEASES

What a bumper store of NEW 16 mm. films the G.B. Film Library has for you. A long list of leading stars. Powerful drama in a host of outstanding films of 'SAPPHIRE' calibre...films from famous novels like 'THE 39 STEPS'... films from

true-life drama like 'A NIGHT TO REMEMBER' . . . films you'll laugh at again and again as with 'CARRY ON NURSE' ... and an exciting new selection of shorts to go with them. If it's worth while seeing, it's in the G.B. FILM LIBRARY

THIS FILM WILL PLEASE MANY ... " Observe

FRANKIE VAUGHAN \* HEYWOOD \* BRITTON With Guest Star ANTHONY NEWLEY

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NAME

ADDRESS

The loveable and laughable story of an island honeymoon... JOHN CASSAVETES VIRGINIA MASKELL



NIGEL PATRICK- YVONNE MITCHELL MICHAEL CRAIG - PAUL MASSIE



# BRITAIN'S 'HARVARD' continued from page 69

forms of leadership, and the differences cannot be dismissed with the word 'profit.')

- 2 The nature of business policy and its effects on the systems of authority and communication within the firm. (Again, the situation within a business firm is very different from that in other institutions. For example, civil servants have to interpret laws and regulations, business executives have to interpret customers' demands.)
- The principles of organization and the suitability of various types of organization structure. (The history of a firm, its personalities, its marketing methods and production techniques all affect its structure.)
- 4 The accepted mores of personal relationships, both within the firm and between members of the firm and outsiders. (This is one of the least explored aspects of management yet it is the one which probably has most impact on new recruits to the lower ranks of management.)
- 5 The nature of logical and scientific thought and how it has to be adapted to the needs of business executives. (For example, the need for

making quicker decisions, on fewer facts and in less controlled circumstances than in a laboratory.)

Although it would be the intention that students should study business biographies and histories in order to gain an insight into each of these five subjects, in practice the school would have to organize lectures and discussion classes on each of these subjects and illustrate them with points taken from business biographies and histories.

In addition, business executives could be invited to present papers as at the London School of Economics. Students could be given study projects, involving visits to business firms and interviews with their executives, and they could be required to work in firms during the long vacation, as is the case with engineering students today.

There is a great dearth of good business biographies and histories. But the Harvard Business School had to start with a great dearth of case studies. Similarly, an Advanced Business School at a British university would have to build up most of its own supply of biographies and histories.

This work would help to ensure that both staff and students remained close to the real problems and practices of business executives, steering clear of the ivory tower.

END

# Estate Duties Investment Trust Limited

# 'EDITH'

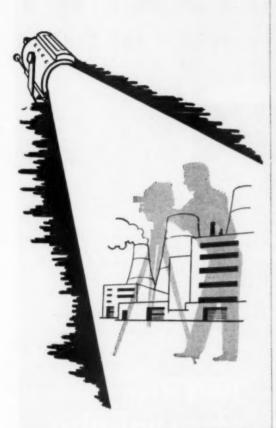
purchases and holds minority shareholdings in private companies and small public companies where shareholders have to make provision for Estate Duty and do not wish to lose control

The booklet 'The Death Duty Problem' will be sent on request to the Trust 7 Drapers' Gardens, London, EC2 Telephone National 0231

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E \*\*



## A NEW LIGHT ON INDUSTRY

Seeing industry through the eye of camera and projector, Turners operators bring a new light and a fresh viewpoint to methods of staff recruitment, public relations, t aining, publicity and selling. All respond to the knowledge and experience hat highly skilled operators put into . . .

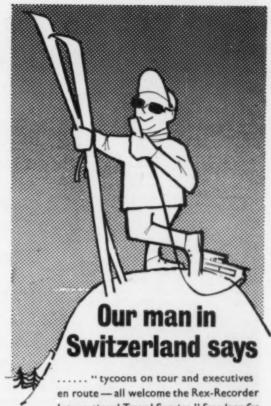
## TURNERS

#### FILM PRODUCTIONS

Profit by Turners experience of industrial filming and photography. Write, call, or phone.

Gamera House, Pink Lane, Newcastle upon Tyne, 1. Telephone: Newcastle 2-5391.

NOVEMBER, 1959



en route — all welcome the Rex-Recorder International Travel Service." Free loan for three days plus the Al. disc service at local prices gets oral instructions or reports to Head Office, as quickly as the post.

Your business needs the Rex international Travel Service — ask for further details.



# THE REX RECORDER MEANS

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REX BUSINESS MACHINES LTD.

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Telephone: EUSton 6854.

117

# NEW EQUIPMENT

## FOR OFFICE, WORKSHOP AND CANTEEN

# For documents or offset plates

A new one-piece transfer process photocopier, the *Lumoprint*, is equally suitable for reproducing office documents or making low-cost offset litho plates. In each case a different chemical is used in the developing section.

Copies made by the Lumoprint may be on light card, airmail paper, film or transparent positive material in addition to standard weight paper. The machine accepts any written, typed or printed document in any colour and can copy non-photographic pictorial material. Copying



Copies fast by transfer process

time is about 12 seconds, and two or three copies can be made from each 'negative,' reducing operating costs when multiple copies are required.

For making offset plates, a process similar to that used for document copying is employed, a metal plate being substituted for paper. Plates made by this method are as long-lived as those produced by other methods, the makers say, and are ready for immediate use after the finished copy has been swabbed with fixing solution. Cost per plate works out at about 3s.

There are two models of the Lumoprint—foolscap and brief size.

Inquiry Ref. No. 0.11/1

#### Quicker, neater work with electric eraser

From America comes the Auto-Erase, a battery-powered electric eraser which enables typing and corrections to be made neatly, effectively and easily.



Powered by torch battery

It operates by speed rather than pressure. Applied gently to the paper surface, the narrow revolving head will remove a single letter without needing a shield; and even when no slip of paper is placed between top and carbon copies the carbons remain unsmeared.

Inquiry Ref. No. O.11/2

#### New desk makes typing easier

One factor which may noticeably slow down the busy typist is fumbling for paper, especially when several different kinds are used. This new desk, with its spacious built-in stationery cabinet, should overcome this difficulty.

The stationery cabinet, over which is a pull-out slide, is topped by a divided accessories tray. Below this are eight shelves, with edges sloped back toward the top to make access to the contents easy.



Neater storage

At the foot of the desk's one pedestal is a box drawer fitted with a lock. A shallow shelf at the rear of the kneehole aperture makes a convenient storage place for such odds and ends as bottles of paste and pencil sharpeners.

The desk, which is veneered in oak with solid top, measures 48 by 27 by 28 in. The hardwood legs are finished with brass ferrules; drawer-handles are made of brass-finished metal. The inside of the large drawer is clear cellulose polished.

Inquiry Ref. No. 0.11/3

#### Lever arch file has convenient design

An irritating feature of the standard lever arch file is that papers cannot be moved across the arch when the mechanism is open, owing to the long, protruding lever. This difficulty has been eliminated by a new design known as See-Saw.

The See-Saw mechanism has a quite short lever, attached to a central pivot

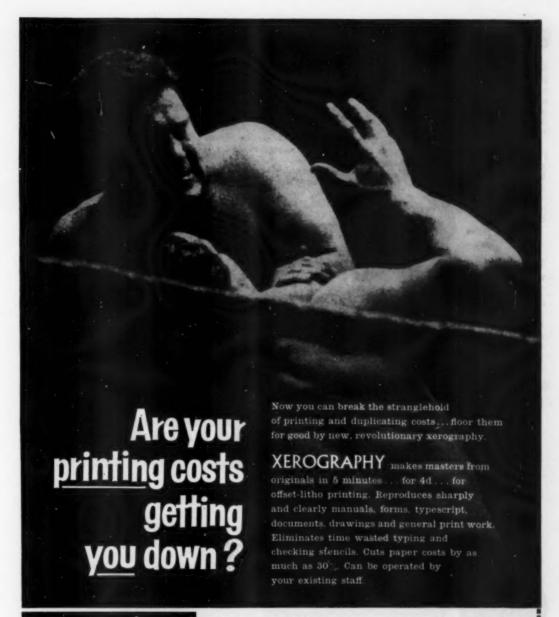
# For more information . . .

about products reviewed in this section use one of the New Equipment Service cards facing page 104 of this issue.

Each item in the section has a reference number. The numbers of items on which further information is requested should be written clearly on the card.

The service is free and no postage stamp is needed.

Equipment included in this survey is selected for its news value alone. Manufacturers are invited to submit details of new and interesting products for consideration. An original photograph should accompany each item submitted.





RANK-XEROX

33-41 MORTIMER STREET LONDON W.1 Museum 6432

> Agents and representatives throughout the world

... but there are a lot more advantages worth finding out about—allow us to give you the full, astonishing xerographic story by asking your secretary to fill in this coupon and attach it to your letterhead.

NAME

POSITION

COMPANY ADDRESS

B/11/56

#### OFFICE EQUIPMENT

below the arches. This lever, which projects just sufficiently to be moved conveniently when the file is full, does not get in the way of the contents when the mechanism is open, and therefore permits papers to be moved freely from side to side.

Other features of the file are extrastrong coated fibreboard covers which are said to be grease and moisture resistant; metal-reinforced edges and corners. Prices are little more than for conventional patterns by the same maker. The file is made in quarto and foolscap sizes.

Inquiry Ref. No. 0.11/4

# Corrections without tears

A neat, quick and convenient method of making corrections in drafts, charts, lists, etc., is provided by Write-On tape. Opaque white, supplied in rolls, it adheres immediately and firmly to paper; can be written on by fountain or ballpoint pen or pencil, and will accept typing.

Inquiry Ref. No. 0.11/5

# Small-size partitions are demountable

For premises where full-height partitions are not feasible or desirable, Miniwall units fill a need. These new half-height barriers clearly demarcate one department from another, yet do not hinder the passage of light and air.

Miniwall partitioning can be extended to any length, and has no tendency to warp or wobble, the makers claim. There are no exposed brackets or other fixtures and the installation can easily be demounted for use elsewhere.



Any length, rock steady

A variety of finishes is available, or the units can be supplied undecorated. Special fittings permit the addition of a solid or glazed superstructure for the display of notices, showcards or similar items.

Inquiry Ref. No. O.11/6

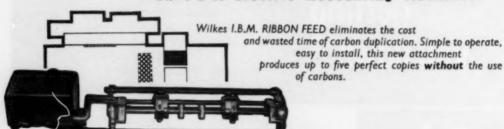
# Tape recorder has easier controls

New version of the popular Stenorette office tape recorder incorporates
several improvements which make it
easier to use. All controls are placed
in front of the instrument; an indicator scale of increased length makes
location of any point of the dictation
an easy matter; a new three-position
switch permits sensitivity to be
adjusted according to the surroundings; interlocking buttons prevent
accidental erasure.

Fully transistorized and incorporating printed circuits, the *Stenorette T* is small in size and weighs 13 lb. Accessories are identical to, and interchangeable with, those of older models, the only exception being a new foot control.

# CUT CARBON COSTS

## On I-B-M Electric Accounting Machines



Investigate this new low cost continuous stationery system, by writing immediately for our free leaflet.

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SPECIALISTS IN CONTINUOUS STATIONERY AND BUSINESS FORM SYSTEMS

# "CARDWHEEL"

now even faster than before!

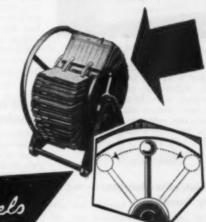
CARDWHEEL...the fastest system for reference and posting... is now fitted with the exclusive CARDWHEEL SELECTIVE BRAKE... an innovation which gives three brake positions:—

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CEN 8402/5

NOVEMBER, 1959

121

#### OFFICE EQUIPMENT



Lightweight, simple

Another new machine by the same maker is known as the *Memorette*. This lightweight model is battery-operated; takes 30 minutes' dictation per tape. Battery life is three to four hours, after which re-charging may be done on a unit which plugs into A.C. mains.

Inquiry Ref. No. 0.11/7

#### Waistcoats defeats pay bandits

An easy and economical way of protecting cash in transit is provided by the new *Thiefcheater* waistcoat.

Designed to look like a standard item of clothing, it incorporates pockets which conceal up to £4,000 in one pound notes.

The waistcoat, which has been approved by the police, is made of supple Vynide plastic and is fastened by a strong centre slide fastener. The pockets are inside, and are made so that the contents can be distributed without causing too obvious a bulge.

Reasonably priced, the *Thiefcheater* is available in small, medium and large sizes.

Inquiry Ref. No. O.11/8

# Steel-framed occasional chairs

Attractive yet durable are these occasional chairs for use in reception areas or executive offices. There are two models, one with, the other without, arms. Framed in square steel tube their standard finish is pearly grey stove enamel, but any other colour can be supplied for a small extra charge.

Upholstery is in vinyl, moquette or Replin in a choice of vivid or muted



Well-sprung seats

colours. Seats are deeply sprung. The backward slant of the rear legs prevents the chairs from being thrust back against walls and damaging the decorations.

Inquiry Ref. No. 0.11/9

# Award-winning ballpoint set

Executives who vainly hunt for a pen amid a pile of papers will welcome the new Recorder desk set. This comprises a ballpoint pen set upright in a base in such a way that the pen is always to hand.

Winner of an Italian award for design, the Recorder gives six months'

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\* About your accounts system?

\* \* Apprehensive about the costs of mechanizing? \* \* Anxious about staffing the new machine?



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All you need is a Frankopost postal franker which imprints the postage on to your letters, parcels and airmail: any value of postage is instantly available and an accurate record of your postal expenditure is shown *automatically*.

Any office, not just big offices, can run more happily and avoid irksome postal duties by using a Frankopost—the franking machine (there is a model to suit your office) that is inexpensive and simple to operate.

# Frankopost

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Your postal costs can be cut, so—if you mail ten or more letters per day, send this coupon at once for full free information.

	UNIVERSAL	POSTAL	FRANKER:	LIMITED
Victory	House, 98/101 8	legent St.	, London, V	V.I. Tel: REGent 2249
	Please let me have		s of the Frank equipment:	copost range of
Nai	me	********		*********
Add	dress	************	************	(B5)
*****		***********		***********

NOVEMBER, 1959

#### OFFICE EQUIPMENT



Six months' writing

service with a single loading, the makers claim. Refills are available in medium or fine blue ink.

The set is made in black, red, bluegreen or beige, and is packed in a box. It can be engraved with a name for gift purposes or supplied with a chain for use in public places.

Inquiry Ref. No. O.11/10

#### Pencil sharpeners in three sizes

Three new models in the Boston series of pencil sharpeners are made in this country under licence from

the American designers. One machine is designed for standard pencils; another has an adjustable rotating guide which accepts most types of pencil; the third, and most elaborate, has an automatic self-feeding mechanism with a new type of spring-loaded pencil grip.

The machines, which have been accepted by the CoID for the Design



Approved by Design Council

Index, are attractively styled. Made of metal finished in mushroom grey, they are fitted with handles and chip trays of cream plastic. The bases, which are finished with rubber feet, may be clamped or screwed to a table, the necessary accessories being provided by the makers.

Inquiry Ref. No. O.11/11

#### Waste bin made in mahogany

Styled to match modern office furniture is this new waste paper bin known as Mallod. Made of plywood, it is veneered with sapele mahogany, finished with clear lacquer. The inside is sealed with heat-resistant material.

The bin is 10 in. in diameter, 13 in. high in front, 15 in. at the back. The elliptical design of the mouth is intended to make it easier to fill.

Inquiry Ref. No. O.11/12



Heat-resistant interior

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The New State Pension Scheme

and its integration with existing private pension funds and schemes is a subject of vital concern to every employer at this time.

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Directors and Company Secretaries are invited to write, in confidence and without obligation, mentioning this advertisement, to the Chairman, Noble Lowndes Pension Service, Noble Lowndes House, Lowndes Street, London, S.W.I.

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Also represented throughout Canada and the United States of America.

CEM PHE

#### INDUSTRIAL EQUIPMENT

#### Loads sacks on lorries

Electric power is no longer necessary to operate a new sack loader driven by a 147 cc. petrol engine. A 10 ft. 6 in. model giving a total lift of 8 ft. 6 in. is available with either a 1 cwt. or 2 cwt. maximum weight capacity. Take-off height is adjustable within 4 ft. so that loads can be



Petrol-driven

taken off at lorry floor height and up to shoulder height of the man on the lorry. The lifting platform turns through 180 degrees.

Inquiry Ref. No. W.11/1

# Dust collector uses new principle

Just introduced into this country is a new dust collector. It operates on a new principle called "selective particle acceleration" and it is claimed that because of this, smaller particles are collected, collection wear is eliminated and power consumption is low.

Inquiry Ref. No. W.11/2

# Quick-change

Manufacturers claim that quickly-fitted and interchangeable attachments in their new overprinter make it possible to switch from printing on the reel to printing single items in a few seconds. To switch irom printing labels on the reel to printing tickets the operator simply detaches the



Saves printing time

rewinder and substitutes the cutter and the stacker.

Inquiry Ref. No. W.11/3

# Tractor powers many attachments

Materials handling and trench digging are just two jobs for which the new 702 tractor and range of auxiliary equipment are well suited. The 37 b.h.p. diesel tractor provides power for a digger, crane attachment, fork lift, angle dozer and a variety of buckets. It incorporates a 'bumper grille' of heavy plate and solid cast steel front axle to take hard knocks. Power steering is fitted as standard,



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throws money away

In the ordinary way, they're meticulous to the last penny. But it's the old story, 'penny wise pound foolish.' Think of it!... they actually write their cheques. Waste hours doing it. Costs the earth in staff that could be used to better advantage. All this, mind you, when a Protectograph Cheque Writer — and just one office junior — can handle from 500 to 1,500 cheques per hour. No human errors with these machines. They're absolutely fraud-proof — 100% secure against alteration. More legible and dignified, too. Banks, business concerns and municipal bodies find they pay handsomely. You will too!

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GERRARD 4163



#### INDUSTRIAL EQUIPMENT



Digs down to 12 ft.

giving extreme manœuvrability. There are six forward gears and two reverse.

The rear-mounted digger can be offset for digging alongside an existing wall or obstruction. Hydraulic pads take all strain off the power unit during digging. Output is claimed to be 23 per cent greater than with other comparable machines. The operator's seat swivels the full 185 deg. of operation.

Optionally, the tractor can be fitted with dual brakes and accessories necessary for travelling along roads as a vehicle. Max. speed is 13 m.p.h. Inquiry Ref. No. W.11/4

# Tap saves

The manufacturers claim that a tap

which gives a spray of warm water can save as much as 86 per cent of the hot water consumption in a large office block.

Inquiry Ref. No. W.11/5

# Powerful adhesive

Apart from an immediate high initial tack, a recently introduced adhesive has the properties of an extended tack time combined with a very high 'wet' or 'green' joint strength. It has special advantages when working with large panels of laminated plastic. The extended tack life allows ample time for the preparation of work-pieces, and the high wet' strength of the bond eliminates any need for clamping or prolonged pressure. It is claimed that rigid phenolic and PVC sheeting, PVCcoated fabrics and leather may be bonded to hardboard, metals, linoleum, wood or even concrete. The firm's adhesives are approved by the Aeronautical Inspection Directorate, the Air Registration Board and the Chief Chemical Inspectorate.

special advisory service is available to help customers.

Inquiry Ref. No. W.11/6

#### Zoom lens cine projector

A new 8mm. cine projector is supplied with a choice of lenses, one an orthodox f/1.6 and the other a 'zoom' lens allowing the size of the picture to be varied according to the size of the room. The projector



Choice of lenses



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BUSINESS



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The unique design of Dixon floor maintenance machines couples multiplicity of performance with concentrated weight and ease of handling. Brush size is not restricted by machine design; thus for certain jobs larger brushes may be used for greater speed and economy. The reserve of power of the heavy duty motor will always be found adequate for the most arduous of operations, and the machines are so perfectly balanced that operator fatigue is avoided.





Dixon machines for waxing and polishing. Dixon machines for dry cleaning, scrubbing and drying. Dixon machines, the world's most versatile and varied range of floor cleaning equipment. Dixon Machines, first to bring modern floor maintenance techniques to Britain, and still the leaders of the industry; first choice of industrial firms, government departments and local authorities who know that for proper maintenance it's definitely DIXON.

If any floor area of 500 sq. ft. or more under your jurisdiction is not yet being maintained by Dixon machines, you can almost certainly save money and increase efficiency by consulting the Columbus-Dixon Technical Advisory Service, which is freely available.

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12 months' guarantee.

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#### INDUSTRIAL EQUIPMENT

takes voltages of 200 to 250 in 10v. steps, and uses a 21.5v. 150 watt lamp which, it is claimed, gives whiter, colour-balanced illumination. The machine is portable, has a swing-open gate, variable speed control, and motor driven re-wind. Capacity is 400ft. Price is £33 with the ordinary lens and £36 with the 'zoom' lens.

Inquiry Ref. No. W.11/7

# Improved electrode holder

A new electrode holder is in two sizes, 400 amp. and 600 amp., taking, respectively, 1/16in, to 4in, and 3/32in, to 4in, electrodes. Fully insulated, it is said to incorporate many refinements and improvements. The head has been designed with an air gap between the inner brass parts and the outer insulators to assist cooling; a screw-in positive cable connection



Fully insulated

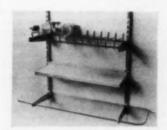
for safe working at high amperages is fitted; and a longitudinally ribbed handle makes for comfortable working. The hook shape of the head enables electrodes to be used right down to the last inch, and makes it possible to hang the holder, complete with cable, anywhere. Every part is replaceable.

Inquiry Ref. No. W.11/8

# Shelves are adjustable

New metal shelves come in 7½ in. and 10 in. widths and lengths of two and three feet. Bottle racks are in two foot lengths only. Each type of

#### INDUSTRIAL EQUIPMENT



Flexible shelving

shelf has a lip at each end which fits into a slot in the supporting bracket. Lengths of shelving can be butted together to give long continuous runs. Prices are from 10s, 10d, to 25s, per shelf.

Inquiry Ref. No. W.11/9

#### Cans for gerosols

A new one-piece container for aerosols is now being manufactured in this country for the first time. It is claimed that its seamless construction makes it extremely strong and highly suitable for nitrogen pressure packs (nitrosols) where absolute gas-tightness is essential. Made of aluminium, the container is available in the 6-oz. size, to take a 1-in. aerosol mounting cup.

Inquiry Ref. No. W.11/10

#### Protects the eyes

A range of glasses, goggles and shields is available for protecting the eyes. The one illustrated has a leather and elastic adjustable headband. Spectacles can be worn underneath.

Inquiry Ref. No. W.11/11



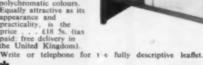
Comfortable

NOVEMBER, 1959

DESIGN IN AN EXECUTIVE CAPACITY

## The Ambassador

We have shaped and coloured the functional efficiency of steel into a filing cabinet that is at once capacious, versatile and fit to stand in the dignity of boardroom or private office. Specifically, it accommodates both quarto and foolscap files; behind the sliding doors is ample space files: behind the sliding doors is ample space for box files, books ... even to a suitcase. One central yale pattern lock secures lid and doors. There is a choice of finish from a range of single and two-tone polychromatic colours. Equally attractive as its appearance and practicality, is the price ... £18 5s. (tax paid: free delivery in the United Kingdom). Write or telephone for



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Paddington Green Works, London, W.2 AMB 1661

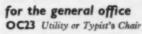


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Here is a de luxe armchair specially Here is a de luxe armchair specially designed to give the dignity and comfort that an executive position calls for. Seat, back-rest, and arm-rests of latex foam rubber and rubberised hair, covered in luxuriously deep uncut moquette, on a modern tubular steel frame, and with swivel action and adjustable seat and back.



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LOCKS ... automatically to the

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Ideal for factory, stores, shops, dairies, bakeries, schools . . . in fact anywhere indoors or out where safety, efficiency, corrosion resistance are important.

- \* All-welded construction.

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#### CANTEEN

#### Machine makes fresh tea

Claimed to be entirely new, a coinin-the-slot tea-dispenser delivers freshly made tea for each cup. Capacity of the machine is 800 grammes of tea; 4,000 grammes of sugar for 600 cups of tea, which is approximately 380/390 cups to the lb. of tea. Six hundred cardboard cups are contained in the machine. Ordinary leaf tea is used. Upon



Uses leaf tea

insertion of a coin, leaf tea is immediately shredded and dropped into a mixing container where boiling water infuses it. It then passes through a brewing chamber, then through a filter into a cup. Milk and sugar are added in predetermined quantities.

Further developments are in hand which it is hoped will enable the machine to deliver black or white coffee-all with or without sugaras well. Each cup of coffee, too, will be individually made.

Inquiry Ref. No. C.11/1

#### King size machine for cigarettes

An electrically-operated cigarette vending machine with a capacity of over 700 packets and a choice of 20 brands will be in service for the first time in Britain this month. The makers claim that the high capacity reduces service calls and that push button control gives quicker and easier service

There is also a manually-operated machine holding 500 packets with a 14-brand selection, and two confectionery machines - one manuallyoperated to take 300 items and the other electrically operated to take 500 items — with fully adjustable shelves so that articles of varying size and shape can be housed.

The company will market in all 15 different vending machines selling, in addition to cigarettes and confectionery, milk, orange juice, tea, coffee, chocolate, chilled snacks, sandwiches, cakes, pastries and hot meals in cans.

Initially, all machines will be operated only by the company, who will pay a commission on sales to those allowing them a site. Later, they will be available on sale and

Inquiry Ref. No. C.11/2

#### **Vending** machine for wall mounting

A new machine vending hot tea, chocolate and soup is claimed to be the only wall model. The machine is 47in, high, 22in, wide and 14in. deep and has a capacity of 500 7oz. cups. The mechanism is for 6d. or 3d. coins. All instant dry mix preparations can be used. The machine costs £330 (h.p. terms are available) or can be rented at £150 a year, including a monthly visit of an engineer. It is estimated that tea at 3d, a cup would show a profit of 1d. and coffee at 6d. a profit of 4d.

Inquiry Ref. No. C.11/3

#### Bags keep chicken hot

Available now are bags made of paper and aluminium foil laminated together for hot barbecued chicken. The chicken is taken off the spit and put straight into the bag. The bag's inner foil is grease-resistant and retains the heat for an hour or two, so that re-heating is not needed if the chicken is eaten as soon as it is unpacked.

Inquiry Ref. No. C.11/4

#### Stool is easily stacked

A stool with a hand-finished mahogany top can be stacked in almost unlimited numbers. It stands 18in. high, has stove lacquered tubular steel legs with plastic ferrules. Cost: 10s.; carriage and packing, 2s. 6d.

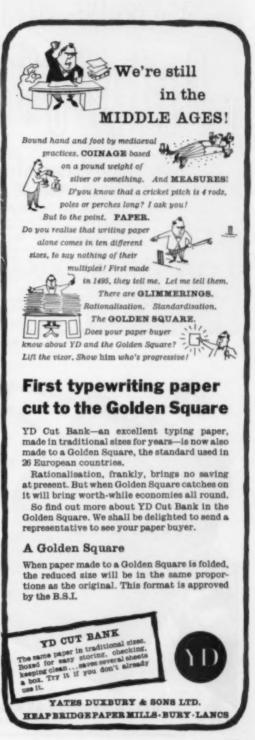
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BUSINESS

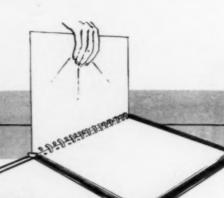


She'll tell you . . . that the Imperial is designed for tireless typing . . . that the work it produces is superb. She'll convince you that the Imperial '66' is the typist's choice . .

Full details from:
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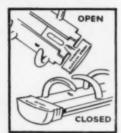
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AMS91

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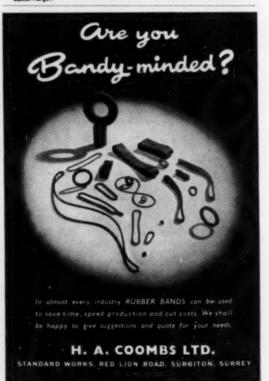
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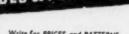
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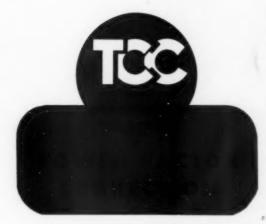
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